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AUTHOR Maffia, Armand P.
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ABSTRACT

An evaluation of one school district's bilingual-bicultural program indicated, overall, that the Spanish-based students are receiving greater benefit than the English-based pupils. This might be remedied if more bilingual instruction were given. The program operates in two elementary schools, grades K-6; the report includes materials stating performance objectives and teaching methods for each grade in several subjects. Tables record students' achievement in performance objectives in each language. The instructional materials used are listed and evaluated; it is felt that greater sequencing of materials is needed. The teaching staff is gauged, and 36 of 38 classrooms had either a bilingual teacher or a bilingual aide. Parents, students, and teachers were questioned regarding their assessment of the program. Parents and teachers both felt more communication between them was necessary, and students were generally supportive of teachers' efforts to help and understand them. It was specified that the program managers should give more attention to curriculum development, sequencing of course content, organization of effort, and provision of personnel. The evaluation includes a summary and recommendations for the program. (Author/CK)

AN EVALUATION REPORT
OF THE
BILINGUAL EDUCATION PROJECT
OF THE
STOCKTON UNIFIED SCHOOL DISTRICT
STOCKTON, CALIFORNIA
1973 - 1974

by

Dr. Armand P. Maffia, Director
Laboratory of Educational Research
University of the Pacific
Stockton, California

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Stockton (Calif. [illegible])

SUMMARY COMMENTS ON THE RESULTS OF THE EVALUATION OF THE SUSD BILINGUAL-BICULTURAL PROGRAM OF 1973-74

With reference to this year's (1973-74) evaluation report of the SUSD Bilingual-Bicultural Education Program, it should first be stated that no baseline data could be used from the previous years. The behavioral objectives on which the students were tested had been revised so that those used in 1973-74 were different from those used in previous years. The performance of the students on the behavioral objectives used in 1973-74 must, therefore, be considered by itself and viewed as satisfactory or unsatisfactory in accordance with what one might reasonably expect.

From the data presented in Table 8, it can be seen that, in general, the students in the bilingual program accomplished a very large number of the behavioral objectives presented to them during the course of the program. They performed as well on the objectives when tested in English or in Spanish. A reservation should be made to this statement with reference to the performance of the kindergarten children. They did as well as other students in general when tested on the behavioral objectives in English, but did relatively poorly when tested on the behavioral objectives in Spanish.

A particularly interesting finding of the study was that at three grade levels (i.e., the 2nd, 3rd, and 4th) the students actually performed better when tested on the behavioral objectives in Spanish than when tested in English.

A question of special interest is whether the Spanish-based student is truly being helped through the bilingual education program. From the data given in Table 9, it can be seen that the Spanish-based students generally do well in the accomplishment of the behavioral objectives; and, furthermore, that they do as well when tested on the objectives in English as when tested in Spanish. It seems particularly significant that the Spanish-based students perform just as well as the English-based students when both groups are tested on the behavioral objectives in English.

The fact that the English-based students perform well on the behavioral objectives when tested in English, but somewhat less well when tested in Spanish, would seem to show a need for a more intensified bilingual education program for the sake of the English-based student.

The figures given in Table 10 indicate that the students in the bilingual education program, as a total group, do not perform as well on a Spanish test related directly to the material they have been exposed to in school as might have been hoped for. Too large a proportion of the students did either only fairly or poorly on the test.

When given a Spanish test related to general social situations, all the Spanish-based students did excellently; but the English-based students did rather poorly, as reflected in the large

percentage of them who could not respond at all to the items presented. (Cf. Table 11.)

Such findings seem to indicate once more that the Spanish-based students are being accommodated well through the bilingual program, but that the bilingual program in its form at the time of this study has not been particularly effective in building up a knowledge of the Spanish language itself. The evaluator would interpret this finding to be a result of fact that not enough time is being spent in the classroom on bilingual education, at least as far as the English-based student is concerned.

With no actual experimentation done on the matter, it is impossible at this time to ascertain the difference which might be effected by offering bilingual instruction through the use of aides who work directly with the teachers in the development of the total instructional program and of aides who work independently of the teachers and who offer bilingual instruction as merely a supplement to the regular instructional program. It would seem most reasonable, however, that the more bilingual instruction forms an integral part of the regular classroom instruction, the more effective the total program would be.

It is the evaluator's recommendation that the purpose and effects of the bilingual education program be given careful scrutiny. The program, as it has been implemented in past years, seems to have accommodated the Spanish-based student rather well. Areas for improvement, however, are (1) for all behavioral objectives to be actually taught and tested and (2) for all students to be helped to attain all the objectives, not just some of the objectives.

With respect to the effect of the bilingual program on the English-based students, the evaluator sees a need for more intensification, time-wise, of bilingual instruction. It is doubtful that one can ever expect the English-based student to perform as well in Spanish as in English, given such a restricted program of bilingual instruction as has been offered. If the bilingual program is viewed as a means of developing a knowledge of the Spanish language, itself, on the part of the English-based student, then there is even more need for an increase in the amount of time devoted to bilingual instruction. If such increased time cannot be alloted to the program, it might be suggested that some other form of language instruction be used.

Respectfully submitted by,

Armand P. Maffia
Program Evaluator

November 6, 1974

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INTRODUCTION

The Bilingual Education Project is conducted by the Stockton Unified School District in two of its elementary schools, Taylor and Washington, beginning at the Kindergarten level and continuing through the sixth grade. The present project is to be viewed as a pilot project in order to study the feasibility of introducing still further bilingual programs in other schools through the district. Initially introduced to the district through the aid of a federal government program, the project during the 1973-74 school year was supported and directed by the district, itself, from the Kindergarten level through the second grade but was continued under the sponsorship of the federal program from the third through the sixth grade levels.

The evaluation phase of the project covered all grade levels and involved a study of the five principal areas: Instructional Methods, Use of Materials, Staff Development, Community Involvement and Management Design. An appraisal of these areas was made to the extent that information became available and the body of this report will consist of the presentation of the data together with an interpretation of the data.

Instructional Methods

The principal teaching method employed throughout the bilingual education project was that of establishing performance objectives against which the accomplishment of the students could be judged. The teachers and their aides at each grade level were provided with an instructional manual in which the content and procedures for each learning activity were specified. After leading the students through a given instructional unit, the teachers and the teacher-aides asked the students to demonstrate their competence in that area. Record cards were kept for each student so that the students' accomplishment of each specific performance objective could be properly recorded.

Since, in the bilingual education project, instruction was given over the same material twice, once in English and then also in Spanish, the competence of the students was also measured and recorded twice. The students were asked, therefore, to respond to the performance objectives in English when presented in English and to the same performance objectives in Spanish when presented in Spanish.

The teachers and teacher-aides were asked by the evaluator to identify each student in the bilingual program as being either English-based or Spanish-based. The English-based students are those who are able to speak English only, or best, and the Spanish-based students are those who are able to speak Spanish only, or best. Students not thus identified by the teacher and teacher-aides, or who have a language base other than English or Spanish, were not included in the evaluation of the instructional methods phase of the program. The design of the study called for a comparison between students who are English-based and those who are Spanish-based as a means of getting

at the effectiveness and influence of bilingual instruction.

In order to aid in the interpretation of Tables 1 through 7, which give an analysis of student responses to the performance objectives, the entire list of performance objectives used at each grade level during the 1973-74 school year is reproduced below. Since the identical performance objectives were used in the Spanish phase of the project as in the English phase, only the English version of the objectives is given here. It should be noted, also that a few of the performance objective statements could not be located by the evaluator, even with the assistance of personnel closely involved with the project, and therefore, could only be numbered but not actually listed.

PERFORMANCE OBJECTIVES - KINDERGARTEN

Development of Self-Concept

Identity

1. To develop his self-concept by having him look at himself in a full length mirror and by having him respond to language models describing himself, the kindergarten student will have the knowledge to state his name clearly when asked, "What is your name?" and will also know the name of one of his classmates when asked, "What is his/her name?"

2. After lessons, developing a sense differentiation between sexes, the student will have the comprehension to say when asked, "Are you a boy?" "Yes, I am." or "No, I am not." or when asked, "Is she a girl?" he will answer, "Yes, she is." or "No, she's not."

3. To enhance his personal understanding, the child will know the names of 8 parts of his body with 100% accuracy as recorded on a checklist by the teacher.

4. After lessons on the names of the family members, i.e., sister, mother, etc., the student will have the knowledge to name all the members in his immediate family and draw a picture of them.

5. After lessons on the name of the school and the room number, the student will have the knowledge to draw a picture of the school and to correctly name the school and room number in the picture.

6. After lessons on the home and the neighborhood in relation to the school, the student will have the knowledge to name the number, street, city, and state of his home.

7. Given a set of assorted crayolas and given a blank paper doll to color, the kindergarten student will have the comprehension to color in the doll with 60% accuracy as to his own color of hair, clothing, and physical characteristics.

8. The child will demonstrate his knowledge by naming 3 articles of his own clothing with 100% accuracy as measured by the teacher.

Activities in School

9. After several lessons on what we do at school, the kindergarten student will have the knowledge to name 8 verbs denoting school activities, i.e., talk, draw, color, play, sing, count, march, salute the flag, cut paper.

10. After lessons on what children like to do in school, the kindergarten student will, individually or in a small group with similar likes, apply his knowledge of this learning to role play his preferred activities.

Learning to Listen and Taste

11. After lessons on sounds in the classroom such as feet marching, hands clapping, music playing, singing, etc., the kindergarten student will be able to close his eyes or look away and then have the comprehension to identify the sound which the teacher makes.

12. Given pictures of farm animals or pets, the student will have the knowledge to name the sound that they make, i.e., bark, quack, etc.

13. Presented with sounds made by the teacher or a tape of human sounds, such as crying, singing, etc., the student will have the knowledge to name the sound which he is hearing.

14. After lessons on animal sounds from a tape recorder, the student will comprehend to identify the actual sound by naming the animal that actually makes the sound.

15. After hearing a tape on sounds in nature, the student will have the comprehension to identify sounds like the sound of rain, a river, the surf, thundering, etc.

16. Given a chart showing pictures of children reading books, painting pictures, etc., the student will have the comprehension to say which of the five senses are being used in each picture, i.e., the figure reading the book is using his eyes, etc.

17. Presented with a table which contains something fragrant, spicy and pungent, the student will apply his knowledge to say, "I smell something fragrant like perfume." for the 2 odors.

18. Having tasted several items of food, some of which are salty, sour, or sweet, the student will apply his knowledge to say, "This potato chip is salty." etc.

19. After hearing a tape on sounds of weather, the student will also be able to interpret the weather message from certain sounds in nature, i.e., if he hears thunder, he will say it will rain.

Science

20. Presented with two-dimensional shapes, a circle, triangle, square, rectangle, and ellipse, the student will have the knowledge to name them correctly as listed on a chycklist.

21. Shown objects of 10 different colors, the student will have the knowledge to say the names of 8 out of 10 of those colors correctly as recorded on a checklist by the teacher.

22. Given many concrete, tangible items such as: turtles, wheels, blocks, marbles, etc., the student will analyze and point out the similarities between these objects and the two-dimensional shapes as listed on a checklist.

23. After lessons on size with some of their own toys or fruits, the student will be able to analyze and group items of like sizes into their proper categories with 60% accuracy as seen on a checklist.

24. Given 4 jumbled groups of pictures of shapes, the student will have the comprehension to discriminate their size and place them in the same size groups and be able to say, "These are the same and these are different," 3 out of 4 times as recorded on a checklist.

25. Given many items of different colors, textures, or sizes, the student will be able to apply his knowledge about them according to one characteristic to separate them into different groups; however, he will be consistent in whatever basis he uses (i.e., color), as checked by the teacher.

26. After lessons on the components of shapes (lines, angles, etc.) the student will apply his knowledge to form a called for shape by arranging the proper cut-out components in order. 60% accuracy will be considered the minimal acceptable standard as recorded on a checklist.

27. After discussions with the children about how we can see the various shapes in objects like cars, houses, etc., the student will be able to apply his knowledge to construct the form of an animal or house from these shapes on the feltboard with 75% accuracy as recorded on a checklist.

28. Given paint and brush or crayons, the student will know how to paint or draw scenes containing shapes; i.e., balls, wheels, etc. on a large newsprint showing his grasp of the concept of the relationships of shapes to his environment as recorded on a checklist.

29. The child will know how to count from 0 to 10 with 100% accuracy as measured by the teacher.

30. The child will have the comprehension to recognize the written numerals 0 to 10 with 100% accuracy as measured by a teacher's checklist.

31. When given the opportunity to display classwork, the students will give evidence of positive self-concept by volitionally posting their work.

Behavioral Objectives in the Affective Domain Areas

32. During science period lessons, the student responds by asking questions and often adding his own personal comments.

33. After lessons on live animals, fish, or shells, the student will respond to his interest during his spare time by cleaning or feeding the animals in the cages or aquariums, etc.

34. When provided with a choice of extracurricular choices, the student will organize some of his time to play with the science models, equipment, etc.

35. During open houses or parent visitations of classroom activities, the student will value his knowledge and explain to his parents what some of the items are, etc. in either Spanish or English.

36. Students will evidence positive self-concepts by their total responding or sub-scale scores on a self-report measure (The Self-Appraisal Inventory) requiring YES-NO responses to a series of statements dealing with self-concept along four dimensions: (1) general, (2) family, (3) peer, (4) scholastic.

37. Songs

38. The teacher will take the students, in small groups or large, out of the classroom to enrich the science instruction by walks and other activities which will enhance the students' interest in nature.

Reading Readiness

39. Given a group of objects, the child will have the knowledge to identify the one that is like another in the group.

40. Given a group of objects, the child will have the knowledge to identify the one that is different from the others in the group.

41. Given an initial consonant sound, the child will have the knowledge to identify from a group of objects the object whose name begins with that sound.

42. Given the name of a letter, the child will have the knowledge to identify from a group of symbols the symbol for that letter.

43. Given the name of a letter, the child will have the knowledge to identify from a group of objects the object whose name begins with that letter.

44. Given specific attribute, position, size, quantity, shape, the child will have the knowledge to identify from a group of objects the one that has that attribute.

45. Given the name of a general class of objects, the child will have the knowledge to identify from a group of objects the one that belongs to the class named (nouns).

46. Given a singular or plural noun, the child will have the knowledge to identify from a group of pictures the one that represents the number and gender of the pronoun used (pronouns).

47. Given an action verb, the child will have the knowledge to identify from a group of pictures the one that represents the action described by the verb (verbs).

48. Given an adjective, the child will have the knowledge to identify from a group of pictures the one that represents the characteristics or quality described by the adjective (adjectives).

49. Given a singular or plural noun, the child will have the knowledge to identify from a group of pictures the one that represents the number of the noun used (plural).

50. Given a preposition, the child will have the knowledge to identify from a group of pictures the one that represents the relationship described by the preposition used (preposition).

51. Given verbal directions, the child will have the knowledge to put his name on paper using a writing instrument and having no visual guide.

52. Shown geometric shapes, the child will have the knowledge to reproduce them on paper using a writing instrument.

53. The child will know the names of the days of the week with 100% accuracy as measured by the teacher.

54. The child will know the name of the present month with 100% accuracy as measured by the teacher.

55. The child will know the name of the present season with 100% accuracy as measured by the teacher.

56. The child will know the names of 10 classroom objects with 100% accuracy as measured by the teacher.

PERFORMANCE OBJECTIVES - 1st GRADE

Science

Section I - Perceptions

1. The student will identify by name the following colors: red, blue, yellow, green, orange, purple, white, and black as evaluated by the teacher.

2. The student will describe sounds as being high or low, loud or soft, and long or short, as evaluated by the teacher.

3. The student will describe odors as being strong or slight, and as being like or unlike another odor, as evaluated by the teacher.

Section II - Measurements

4. The student will, through his own senses and by use of a thermometer, compare one temperature as being hotter or colder than another temperature, as evaluated by the teacher.

5. The student will, through arbitrary and standard units, compare the dimensions of familiar objects, as evaluated by the teacher.

Section III - Classifying

6. The student will classify objects according to color, shape, and size, to the satisfaction of the teacher.

7. The student will classify a set of objects according to function or intended use, to the satisfaction of the teacher.

8. The student will classify a teacher selected set of objects according to his own system, to the satisfaction of the teacher.

Social Studies

9. When asked about his immediate family, the student will demonstrate his knowledge of all the family members by naming them. Minimum acceptable success for each student should be at least at a 90% level, as measured by his teacher.

10. After a walk around the neighborhood, the student will apply his knowledge of the direction of his home by pushing a toy car on a map over the proper route with 75% accuracy, as measured by his teacher.

11. After lessons on other peoples, the student will have knowledge to recognize 3 or 4 differences or likenesses from pictures provided him by the teacher, as measured to the teacher's satisfaction.

12. After a lesson on various professions and occupations, the student will analyze and make a choice as to what he would like to be

when he grows up. Minimal success will be achieved when he gives at least two reasons for his choice, i.e., nice uniform, pay, etc., as measured by his teacher.

13. Given a lesson on the student's responsibility to his pet, the student will know and recall 2 out of 3 needs that apply to his pet as measured by his teacher.

14. After a lesson on physical and personal growth, the student will analyze five changes he has undergone from babyhood to the present i.e., height, weight, walking, talking, etc., with 75% accuracy, as measured by his teacher.

15. After a lesson on the 4 food groups, the student will apply his knowledge to categorize pictures of food into the four different groups with 100% accuracy, as measured by his teacher.

16. After a lesson on transportation, the student will apply his knowledge and classify pictures of transportation into the 3 major categories -- land, air, water -- with 80% accuracy, as measured by his teacher.

17. After a neighborhood walk, the student will seem excited and happy while relating his personal experiences to his friends.

18. Given art media to develop some project, the student will report progress of the work to the teacher or peer and seem enthused about it.

19. During lessons the student will listen with good attention and will be able to follow directions given by the teacher with 60% accomplishment of task given to do.

20. Obeys rules at school and while traveling to and from school respects private and public property.

21. The student will show enthusiasm and will willingly participate in any cultural program, i.e., singing, etc., especially on holidays.

Objectives 22 - 50 not furnished.

PERFORMANCE OBJECTIVES - 2nd GRADE

Science

Observing Shapes and Objects

1. After appropriate activities, the student will draw the line or lines which divide a symmetrical shape into identical halves, to the satisfaction of the teacher.

2. Provided with adequate experience and direction, the student will match common shapes with parts of animals, to the satisfaction of the teacher.

3. Given appropriate experiences, the student will identify objects by using several of his senses, to the satisfaction of the teacher.

Describing Motion, Change, or Growth

4. Given proper equipment and experiences, the student will describe the effects of heavy and light objects in motion, to the satisfaction of the teacher.

5. Given necessary materials and observations, the student will describe or demonstrate a procedure for growing a plant from a seed, to the satisfaction of the teacher.

6. Given the opportunity to plant and observe a mold garden, the student will describe its color, size, and shape, to the satisfaction of the teacher.

Measurements--Making Comparisons

7. Given experiences in using a balance beam, the student will compare the weights of objects, to the satisfaction of the teacher.

8. Given containers graduated in milliliters, the student will compare volumes of water or sand, to the satisfaction of the teacher.

Social Studies

The Family

9. After thorough discussion about their families, the student will know and be able to name at least 2 likenesses and 2 differences about one of his school mate's families which has been discussed, as measured by his teacher.

10. After this unit on the family, the student will know enough to name each family member's status by expressing their status in the family, i.e., oldest-youngest; biggest-smallest; grandson-son, nephew, etc.

11. After completion of the unit, the student will comprehend and be able to explain some of the things which his family has taught him how to do, and why he feels that they are important, as measured by his teacher.

Work

12. After asking his parents about the type of work which they do, the student will know how to draw a picture of his parents depicting the type of work that they do.

13. Given a set of pictures depicting types of jobs from the past and also pictures depicting the more modern ones, the student will comprehend and be able to make remarks about the differences and also make inferences about some possible future jobs.

14. Given a list of service workers, the student will know the type of goods and services provided by them. His accuracy should be at least 80% correct in any of the services that he chooses, as measured by his teacher.

Man and Tools

15. After study on common hand tools, the student will know their names with 80% accuracy as determined by his teacher.

16. Given certain hand tools, the student will apply his knowledge to describe their function and demonstrate their use to the teacher's satisfaction.

17. After study on prehistoric forms of tools, the student will be able to draw a scene depicting early prehistoric life and their use of these tools. The relationship of tools to the work being done in the drawing should be 80% correct as measured by his teacher.

Hunger and Food

18. Given an assortment of foods, the student will know how to sort them into their proper categories as being animal or plant and place them under the properly labeled column with 80% accuracy, as measured by his teacher.

19. Given the task of telling the class about his family's favorite food, the student will know how to write a recipe for it and tell the class how to do it with 80% accuracy, as measured by his teacher.

A Market

20. After a visit to a market, the student will comprehend the action and be able to name and list the sequence of a buying-selling transaction, that is: Goods, services and money exchange with 80% accuracy, as measured by his teacher.

21. After the completion of this unit, the student will know and be able to name the different types of markets and stores in Stockton with 80% accuracy, as measured by his teacher.

22. After studying about various types of bartering methods that have gone on in the world since early times, the student will know and be able to cite 2 or 3 examples of trading without the use of money as we know it now with 80% accuracy, as measured by his teacher.

Deserts

23. After observing and studying a picture of a desert, the student will have knowledge to describe some of the plants and conditions visible to him with 80% accuracy, as measured by his teacher.

24. After continued study of the desert, the student will be able to comprehend that the desert is an arid land because of its geographical location and be able to compare it with a colder land with 80% accuracy, as measured by his teacher.

25. Given a terrarium to work, the student will be able to analyze and demonstrate how an irrigation system should work with 80% accuracy as measured by his teacher.

What is Law?

26. After preliminary discussion on rules, the student will have knowledge to help the class in organizing and drawing a class chart having a few rules for the improvement of the class behavior with 80% accuracy, as measured by his teacher.

27. After completion of this unit, the student will be able to analyze and tell the difference between a rule and a law with 80% accuracy, as measured by his teacher.

28. After completion of this unit, the student will be able to comprehend the importance of laws for our protection by reciting one example of this to the teacher's satisfaction.

Studying a Landscape

29. Given a lesson on direction, the student will know enough to go into the yard and point to all four directions and name them correctly to the satisfaction of the teacher.

30. After continued work in this unit, the student will know how to draw a map of his classroom and label some of the objects in it with 80% accuracy, as measured by his teacher.

31. Given a map drawn by another student, the student will comprehend it enough to be able to locate an object by following the map correctly with 80% accuracy as measured by his teacher.

Parks

32. After an excursion to a park, the student will know enough to locate the park on a city map and talk about some of the points of interest which he observed with 80% accuracy, as measured by his teacher.

33. After a question and answer period, the student will comprehend to conclude by saying that a park is a place for enjoyment and that people also work there, with 80% accuracy, as measured by his teacher.

34. Given a paper and paints, the student will know how to paint a picture of the park which will be representative of the park visited with 80% accuracy, as measured by his teacher.

35. After conclusion of this unit, the student will comprehend enough to write a short story about his trip to the park with 80% accuracy, as measured by his teacher.

Rivers

36. After discussion or a trip to a river, the student will know how to draw pictures of the many living creatures who inhabit rivers or live near them and describe why they need to live there with 80% accuracy, as measured by his teacher.

37. Given a set of pictures showing a river with dams, boats, etc., the student will comprehend and tell how rivers help mankind with 80% accuracy, as measured by his teacher.

The Moon

38. After completion of the unit on the moon, the student will know how to draw a diagram showing the relationship of the moon to the earth and the sun with 80% accuracy, as measured by his teacher.

39. Also after completion of the unit, the student will know how to draw an astronaut's uniform and explain some of the reasons for its being like it is with 80% accuracy, as measured by his teacher.

40. After the completion of this exercise, the student will comprehend enough to write a short paragraph about his feelings about the moon with 80% accuracy, as measured by his teacher.

Language

41. After listening to a tape with several languages on it and given a list of countries and the language spoken there, the student will know how to match them with 80% accuracy, as measured by his teacher.

42. After hearing a tape emitting several animal sounds, the student

will comprehend and conclude that animals may also have their own ways of communicating with 80% accuracy, as measured by his teacher.

43. Presented with pictures of animals, the student will analyze them and state that animals smell with their nose, hear with their ears, etc., but that the only thing that may be different is that humans have a language. He will do this with 80% accuracy, as measured by his teacher.

Holidays

44. After study on several holidays, the student will know and describe what happens during these holidays with 80% accuracy, as measured by his teacher.

45. Given the task of depicting in a drawing what people do during holidays, the student will comprehend enough to make an accurate representation of whatever holiday he chooses with 80% accuracy, as measured by his teacher.

Performance Objectives in Affective Domain

46. After a neighborhood walk, the student will seem excited and happy while relating his personal experiences to his friends.

47. Given art media to develop some project, the student will report progress of the work to the teacher or peer and seem enthused about it.

48. During lessons the student will listen with good attention and will be able to follow directions given by the teacher with a 60% accomplishment of task given to do.

49. Obeys rules at school and while traveling to and from school respects private and public property.

50. The student will show enthusiasm and will willingly participate in any cultural program, i.e., dancing, singing, etc., especially on holidays.

Objectives 51 - 65 were not furnished.

PERFORMANCE OBJECTIVES - 3rd GRADE

Science

Classifying

1. Given appropriate guidance, the student will identify matter as solid, liquid, or gas by its physical properties to the satisfaction of the teacher.

2. Given adequate experience, the student will classify colors as primary, secondary, and complementary, to the satisfaction of the teacher.

3. Given time to make observations, the student will classify things found in an aquarium as to living or non-living, types of locomotion, color and size, to the satisfaction of the teacher.

Measuring

4. Given several experiences in constructing and using thermometers, the student will demonstrate accurate use of a Celsius and/or Fahrenheit thermometer, as evaluated by the teacher.

5. Provided with proper equipment and practice, the student will accurately measure the weights of small objects, as evaluated by the teacher.

6. Given necessary vegetation and measuring devices, the student will measure the growth of seedlings and cuttings, as evaluated by the teacher.

7. Given necessary instruction and equipment, the student will accurately measure the volume of liquids or powders, to the satisfaction of the teacher.

Making Inferences

8. Given time for observations, the student will infer the contents of closed containers, as evaluated by the teacher.

Social Studies

9. After a thorough discussion about the president of the United States, the student will demonstrate knowledge of the current president, know where he lives by pointing to it on a map, and score 75% of the answers correctly on a quiz prepared by his teacher.

10. After lessons on voting, elections, political campaigns, etc., the student will be able to analyze and respond correctly in a discussion on these matters, as measured by his teacher.

11. On a lesson about Indians in the San Joaquin Valley, the student will be able to show knowledge of Indians by listing or discussing

various components of Indian life (home, food, clothing), as measured by his teacher.

12. After lessons on the heritage of different ethnic groups, the student will be able to demonstrate knowledge of his own cultural background as different from other ethnic groups by the comparing of certain elements of each.

13. After lessons on the different kinds of communication (looking, smiling, oral language, writing, radio, telephone, etc.), the student will apply what he has learned in a role playing situation and perform with 75% accuracy as measured by his teacher.

14. After lessons on health and especially the care of the teeth, the student, given a toothbrush and paste, will demonstrate knowledge on how he should brush his teeth and will construct a personal chart by which to keep track of his daily tooth care.

Performance Objectives in Affective Domain

15. During discussion in the social studies class, the student will ask questions about various human behaviors. The teacher may use a checklist to list the number of questions or their categories, i.e., "What do they do for a living?" etc.

16. When presented with a choice of looking at pictures of various disciplines, the student will spend most of his time looking at pictures of people and their habitats, and costumes.

17. When faced with group encounters, such as committee work or play on the playground, the student will show more tolerance as the year progresses, as measured by his teacher.

18. After discussion of holidays or "fiestas", the student will voluntarily look for and read cultural booklets provided by the project.

Objectives 19 - 26 were not furnished.

PERFORMANCE OBJECTIVES - 4th GRADE

Science

Inferences and Observations

1. Given definitions and examples of observations and inferences, the student will distinguish the two in cartoon situations, to the satisfaction of the teacher.

2. Given several observations in cartoon form, the student will draw one or two reasonable inferences, to the satisfaction of the teacher.

3. Given pictorial representation of forest scenes in which there are definite indications of animal activity, the student will list at least three observations and one reasonable inference related to the picture, as evaluated by the teacher.

4. Following an activity in which water is displaced by air, the student will list his observations, draw an inference about where the water went, and perform the activity again to test his inference, as evaluated by the teacher.

5. After recording his observations of candles suffocating under various sizes of jars, the student will predict the approximate time it will take for a candle to become extinguished under other jars of known volumes, and test his predictions, as evaluated by the teacher.

6. Supplied with the necessary equipment and background information, the student will determine the relative amount of oxygen in air, to the satisfaction of the teacher.

Graphing and It's Scientific Uses

7. Given adequate instruction and practice, the student will demonstrate the ability to locate and mark the position of ordered number pairs on a graph, as evaluated by the teacher.

8. Following experiments with a ball dropped from measured heights, and the distance it rebounds, the student will record his findings on a graph, to the satisfaction of the teacher.

9. Based on the graph just constructed, the student will predict how high a ball will bounce dropped from selected heights, and test his predictions as observed by the teacher.

Magnetism and Electricity

10. Given adequate instruction and time to experiment, the student will demonstrate basic understanding of magnets by identifying the north and south-seeking poles, and describing the attraction and repulsion of unlike and like poles, to the satisfaction of the teacher.

11. After constructing an electromagnet, the student will demonstrate the fact that the polarity of an electromagnet varies with the direction of the current powering it, as evaluated by the teacher.

12. Provided with proper materials and instruction, the student will construct an electric motor and explain the interaction of the magnet and electromagnet, to the satisfaction of the teacher.

California History

From the Coast to the Mountains in California

13. Given a California relief map, the student will have knowledge to identify the various land forms when pointed out to him by the teacher with at least 70% accuracy, i.e., the Central Valley, the Sierra Nevada, the Basin Range, the Mojave Desert, the Colorado Desert, the Coast Ranges, the Penninsular Ranges, the Transverse Ranges, the Klamath Mountains, the Cascade Range, and the Modoc Plateau.

14. The student, when shown a map of the U.S., will have the knowledge to tell the teacher the relative size of the state of California in comparison to the other two largest states, i.e., Alaska and Texas, with 70% accuracy.

15. The student will comprehend the definition of climate and will be able to describe the climate of the central valleys, coastal mountains and the climate near the ocean with 75% accuracy, as measured by the California History Unit Examination.

Indians the First Californians

16. The student will know with 75% accuracy who the first inhabitants in California were and also where we think they came from, as measured by the California History Unit Examination.

17. After studying the life styles of the Indian tribes as they wondered on foot, the student will know the two Indian tribes that lived in the San Joaquin Valley and will also name 2 or more tribes that lived elsewhere in California, as measured by his teacher.

18. The student will comprehend and describe the home life of the Indians (the foods, clothing, home, etc.) with about 75% accuracy, as measured by the California History Unit Examination.

Spanish California

19. Given a list of the first explorers to come to California, the student will comprehend enough to discuss where they came from and what their mission was with about 75% accuracy, as measured by the California History Unit Examination.

20. After a week or more of study on the Missions and mission life in California, the student will have the knowledge to draw a

picture showing what early mission life was like in California with 75% accuracy, as measured by the California History Unit Examination.

21. After the Unit on Spanish California, the student will know with 75% accuracy how many years Mexico fought for its independence from Spain, as measured by the California History Unit Examination.

California Becomes Mexican

22. After completion of this unit, the student will be able to comprehend the following words well enough to use them in a sentence with 70% accuracy: (1) allegiance, (2) ranchos, (3) culture, (4) alcalde, (5) structure, (6) procedures.

23. The student will be able to comprehend and answer questions on what California was obligated to do for Mexico and also how did Mexico better California with 75% accuracy, as measured by the California History Unit Examination.

24. The student will comprehend what things were developed in California under Mexico's rule by naming some of them with 70% accuracy, as measured by the California History Unit Examination.

American California

25. After studying about the huge migration of Americans to California after the fur trappers came, the student will know enough to discuss his reasons why the Indians and the Mexicans were sometimes hostile to the pioneers. The minimum level of accepted performance will be that his assumptions are within the realm of reality and within the scope knowledge within which the teacher has taught them.

26. After studying about the interest other nations had in California, namely, Russia and England, while it was under Mexican rule, the student will be able to simply state what the Monroe Doctrine said with 70% accuracy.

27. After discussion about the rumors that the U.S. would soon be at war with Mexico in 1845 and after discussing the incident where forty or fifty Americans took the law into their own hands on June 10, 1846, and formed a new nation called the "California Republic", the student will analyze the incident and be able to distinguish between fact and opinion about current information relating to the takeover of California by the Americans, as measured by his teacher.

28. Given the facts about the United States Navy takeover of Monterey Bay on July 2, 1846 by Commodore John D. Sloat, the student will know that Com. Sloat gave as a reason for this that Mexico and the U.S. were at war with each other and that this was the only time that California was under a military government.

29. Having studied about the Mexican War between the U.S. and Mexico and that most of the early fighting took place over the state of Texas, the student will be able to comprehend the difference between a state and a territory with 70% accuracy, as measured by his teacher.

30. In studying about the indecision and long delay in deciding what form of government to have in California after the Mexican War, the student will analyze and state the importance of the formation of a constitution to operate a democratic type of government and that California was finally admitted on September 9, 1850 as the thirty-first state.

31. Given the question on a short quiz about what languages were used by the constitutional convention in Monterey in 1849, the student will know and state that the two languages used were Spanish and English and that the first Constitution was written bilingually.

32. Given the task of writing about the Constitutional form of government in California after it became a state, the student will apply his knowledge to write a paragraph which will be 70% accurate in relating that the constitution guaranteed: freedom of speech, freedom of worship, freedom of the press, and freedom to assemble, and that there was no slavery allowed but that only white male citizens of age twenty-one or over were permitted to vote.

The Growth of California

33. Shown a bar graph showing the growth of cities in California from 1846 to 1972, the student will know their meaning and be able to read the horizontal and vertical legends to explain what the graph means to the teacher with 70% accuracy.

34. After studying the unit on the big spurt in growth during the Gold Rush in 1849 in California, the student will comprehend and be able to state how this would change life in the state. He should be able to name correctly at least 3 ways in which life was changed for California.

35. After study of the hardships of travel to California since there were no railroads at that time, the student will know and be able to explain why the government loaned money to railroad companies like the Central Pacific Railroad to build eastward and the Union Pacific Railroad to build westward and why the government still helps the railroad.

36. In studying about the contributions of the many different peoples who made California what it is, the student will comprehend and define the Chinese contribution to the completion of the railroads at Promontory, Utah in May, 1869.

37. Given the task of drawing a timeline of events or discoveries that made the population of California soar, the student will

apply his knowledge to include: tourism, healthful living, real estate, the black gold rush, the Dust Bowl, World War Defense Plants, manufacturing, and food production. The teacher will expect a 70% level of accuracy shown on the timeline.

38. After studying about labor unions and automation, the student will be able to comprehend and explain how unions can improve the living conditions of workers in a short paragraph in which he shows 70% accuracy of information previously presented to the class by the teacher.

Problems in California

39. Given a list of worthy contributions to the state of California by ethnic groups, the student will know what groups were responsible by writing the name of the group which made the contributions with 70% accuracy.

40. Given the task of drawing a bar graph representing the five largest states in the U.S. and their growth since 1900, the student will apply his knowledge to name at least 3 serious problems created by over population in each of these areas.

41. Given the meaning of the word "metropolitan", the student will comprehend and be able to cite living conditions and problems in such an area with 70% accuracy.

42. Given a tour of the urban renewal area of Stockton or having studied it in the classroom, the student will apply his knowledge and write a short paragraph on the importance of city planning for the beautification of cities and the prevention of slums.

43. After completion of this unit on present problems of traffic, pollution, smog, work, etc., the student will be able to apply his knowledge to write a paragraph about a picture he will draw concerning one or several of these problems and a possible solution. The solution should be 70% feasible as evaluated by his teacher.

PERFORMANCE OBJECTIVES - 5th GRADE

Science

Electricity: Circuits and Conductors

1. Given the proper equipment, the student will construct a complete electric circuit consisting of a battery, a lightbulb, and 2 wires, as evaluated by the teacher.

2. Given the proper testing equipment and several circuit boards, the student will infer a possible circuit diagram for each board, as evaluated by the teacher.

3. Given adequate experiences with OPEN, CLOSED, SERIES, and PARALLEL circuits, the student will identify models of these circuits, to the satisfaction of the teacher.

4. Given the proper equipment and a selection of materials, the student will list those materials under two categories: electrical CONDUCTORS and NON-CONDUCTORS, to the satisfaction of the teacher.

Chemical Analysis

5. Given adequate instruction, the student will make a record of observed chemical changes when vinegar, iodine solution, and water are added to baking soda, baking powder, cornstarch, and talc, to the satisfaction of the teacher.

6. Given the three liquids and four powders from Objective #5 in unlabeled containers, the student will use data previously recorded to identify the liquids and powders, to the satisfaction of the teacher.

7. Given mixtures of two powders from Objective #5 and the liquids listed, the student will identify the two powders in the mixture, to the satisfaction of the teacher.

Predicting from Observations

8. Given adequate experience with the movement of a pendulum, the student will construct a table relating swings per minute and length of pendulum arm, to the satisfaction of the teacher.

9. Given adequate instruction, the student will predict speeds of pendulum movement based on previously gathered data, to the satisfaction of the teacher.

10. Given adequate instruction and experience with balance beams, the students will make a record of the relative weights of two kinds of objects, and using this record, predict further results, to the satisfaction of the teacher.

U. S. History

The Earliest Americans

11. Given a map depicting Asia and the North American Continent, the student will demonstrate knowledge of the probable route across the Bering Strait used by Asian immigrants by indicating accurately this route on the map, as measured by his teacher.

12. After studying the war customs of the Plains Indians, the student will show comprehension of their chief purpose in fighting, (to obtain feathers for enemies touched) by drawing a picture of the subject, its accuracy to be measured by the teacher.

13. The student will apply his knowledge of the California Indians' favorite food by helping to prepare acorns in the classroom according to the formula which he has previously studied, as measured by the teacher.

14. After studying Mexico's Aztec civilization, the student will apply his studies by writing a 500-word composition in which he writes from the point of view of an actual participant in Aztec culture (a warrior, a priest, etc.), success of the paper to be measured by his teacher.

15. The student will demonstrate knowledge of various aspects of the Pueblo Indians' civilization by passing a true-false test (i.e., They were warriors, rather than farmers. TRUE FALSE), with 75% accuracy.

16. After studying the Northwest Indian tribes, the student will analyze the differences between them by writing a list of occupational artistic, and social characteristics for each tribe, with 75% accuracy, as judged by his teacher.

The Europeans Come

17. Given two outline maps, the student will demonstrate his knowledge by drawing the voyages of the Norsemen to Iceland, Greenland, and America on one, and by drawing the 4 trips of Columbus on the other with 75% accuracy.

18. Given a list of the three Spanish explorers discussed, the student will demonstrate his comprehension by being able to write about the accomplishments of each explorer with 2 out of 3 correct.

19. After studying about the importance Sir Francis Drake had in Britain's position in the New World, the student will apply what he has learned in a role playing situation, as measured by his teacher.

20. To demonstrate knowledge of the French explorations in North America that were made profitable through trade, the student answers a teacher prepared quiz with 75% accuracy.

21. To demonstrate comprehension of Dutch and Swedish settlers that came to North America for profitable trade, the student is to respond correctly in a discussion pertaining to these matters with 75% accuracy, as measured by his teacher.

The English Colonies

22. The student will demonstrate his comprehension of the methods by which the English established their permanence in America by writing a short report on the subject, to be measured by the teacher.

23. The student will apply his knowledge of the religions and cultural reasons motivating the English to settle in New England by participating in the presentation of a class play (writing, directing, acting, scenery and costumes, etc.), the success of his participation to be measured by the teacher.

24. The student will apply his knowledge of early American education by participating in the making of a scale model of a room in either a "dame school", a grammar school, or a college of early America, to be constructed with 75% accuracy, as judged by the teacher.

25. The student will demonstrate his knowledge of the Pennsylvania Quaker Colony by responding correctly in writing to 75% of the questions as asked on a teacher-made test.

26. The student will analyze the differences in the role of women in early America and the role of American women today by writing a composition on the topic, to be measured by the teacher.

27. The student will demonstrate his knowledge of early American entertainment by carrying out one of the following projects: (a) making a quilt, (b) performing a colonial dance, (c) participating in a mock turkey shoot, (d) presenting a scene from one of the English plays performed for the colonists, his success to be measured by the teacher.

Conflicts Arise

28. To demonstrate comprehension of the trading conflict between the French and the English, the student will respond correctly in a discussion about the cause of the conflict and what resulted from it with 75% accuracy, as measured by the teacher.

29. To demonstrate knowledge of the routes of the Spanish treasure ships, the student is to trace on a map the routes the ships had sailed from Peru to Panama and from Mexico to Spain with 75% accuracy, as measured by his teacher.

30. To demonstrate evaluation of the result of the French and Indian War, the student is to write a paragraph about what would have happened if France had won the French and Indian War, as measured by his teacher.

31. After studying the reasons for the colonial unification and the new union, the student is able to demonstrate his knowledge by answering questions prepared by his teacher with 75% accuracy, as measured by his teacher.

Colonial Thought

32. After studying the colonist's attitudes towards witchcraft, the student will apply his knowledge of the subject by writing a paper from the point of view of a witch in colonial times, as measured by his teacher.

33. The student will demonstrate his comprehension of the term "circuit riders" (traveling colonial ministers) by writing a brief description of the term, as measured by the teacher.

34. The student will apply his knowledge of the colonists' British-derived jurisprudence system by helping to conduct a mock trial by jury for the class, to be measured by the teacher.

35. The student will apply his knowledge of which British laws the colonists did not wish to obey by engaging in a debate with another student in which one plays a colonist and the other student plays a British government official, success of the debate to be measured by the teacher.

36. The student will demonstrate comprehension of England's Mercantile Theory (profitable trade for the mother country) by answering written multiple choice questions on a teacher-made test, with 75% accuracy.

37. The student will demonstrate his comprehension of why newspaper editor Peter Zenger's acquittal was a victory for American freedom of the press by writing a short essay, to be measured by the teacher.

British Problems

38. The student will demonstrate his knowledge of the extent of Great Britain's colonies after the French and Indian War by indicating on a map of North America all such colonies, with 75% success, as measured by his teacher.

39. The student will apply his understanding of the colonial attitudes towards the Proclamation Line of 1763 (no colonists could settle west of the Appalachians) by helping to stage a mock town meeting in which various "colonists" debate the issue, to be measured by the teacher.

40. The student will demonstrate his comprehension of the action taken by the colonists in response to British taxation measures by writing a paper, to be measured by the teacher.

41. The student will show his comprehension of the reasons for holding the first Continental Congress by answering correctly 75% of the questions on a teacher-made test.

Struggle for Independence

42. The student will demonstrate his comprehension of the primary result of the meeting of the first Continental Congress (war between the colonies and England) by summarizing the issue in a paper with 75% accuracy, to the satisfaction of the teacher.

43. The student will demonstrate his comprehension of the role the second Continental Congress played in unifying the colonies by responding correctly in writing to 75% of the multiple-choice questions asked him on a teacher-made test.

44. The student will analyze the reasons behind the colonies' request for help from foreign powers in a short paper, it's success to be measured by the teacher.

45. The student will evaluate what might have happened if the American invasion of Canada had been successful by presenting a talk to the class, to be measured by the teacher.

46. The student will show knowledge of the important political roles played by early Americans, such as George Washington, Benjamin Franklin, and Thomas Jefferson, by answering correctly 75% of the questions on a teacher-made test.

47. The student will analyze some of the problems facing the colonists after they had achieved independence from England by writing a short paper, its success to be measured by the teacher.

American Government

48. The student will show comprehension of the mail problems confronting the colonists under the Articles of Confederation by explaining 3 out of 4 of the problems correctly in a talk to the class.

49. The student will demonstrate knowledge of the writing of the United States Constitution by answering correctly in writing 75% of the questions asked him on a teacher-made test.

50. The pupil will analyze the differences among the three main branches of American government (executive, judicial, and legislative) by writing a one-to-three page report on the subject, to be measured by the teacher.

51. The student will evaluate with which of Jefferson's or Hamilton's conflicting political philosophies he tends to agree by explaining his reasons for his agreement in a talk to the class, its effectiveness to be evaluated by the teacher.

Objectives 52 - 70 were not furnished.

PERFORMANCE OBJECTIVES - 6th GRADE

Science

Manipulated and Resultant Variables

1. Given examples and definitions of the terms "manipulated variable, resultant variable, and controlled variable," the student will match the terms with their meanings on a written posttest with 100% accuracy as measured by the teacher.

2. Given liquids of various temperatures, liquids of various volumes, and solids of various masses, the student will measure them in terms of degrees Celsius, mililiters, and grams to the satisfaction of the teacher.

3. The student will keep a written record (either a graph or table) of his findings concerning the following variables:

   a. the time it takes a seltzer tablet to dissolve in various volumes of water,

   b. the time it takes a seltzer tablet to dissolve in a constant volume of water at various temperatures,

   c. the time it takes a seltzer tablet to dissolve in various concentrations of sugar solutions,

   d. the time it takes a seltzer tablet to dissolve in various concentrations of acid solutions to the satisfaction of the teacher.

4. Given the opportunity to find out how much salt will dissolve in a constant volume of water at various temperatures, the student will keep a record, to the satisfaction of his teacher.

Compasses and Magnetic Fields

5. Given a compass and adequate instruction, the student will demonstrate the directions North, South, East, West, Northwest, Southwest, Northeast, Southeast, to the satisfaction of the teacher.

6. Given the proper tools, the student will map the magnetic field around a bar magnet, to the satisfaction of the teacher.

7. Given time and necessary instruction, the student will form a hypothesis about the attraction of repulsion of like and unlike poles of a magnet and show, with magnets, that his hypothesis is accurate to the satisfaction of the teacher.

8. Given maps of the earth's magnetic poles, the student will orally describe their location or locate them on a globe to the satisfaction of the teacher.

Inertia and Mass

9. The student will demonstrate the property of inertia by quickly moving a card out from under a heavy washer or coin, and by accelerating a light and a heavy toy cart by similar rubber bands, as observed by the teacher.

10. The student will measure the relative inertias of several objects in terms of vibrations resulting from the objects being placed in a special vibration device, to the satisfaction of the teacher.

11. The student will record the results of placing known masses in the vibration device in order to estimate the masses of the objects used in Objective #10, to the satisfaction of the teacher.

12. The student will measure the masses of the objects used in Objective #10 by means of a balance beam, to the satisfaction of the teacher.

Quantitative Analysis

13. The student will separate and measure the components of several mixtures by utilizing one of the following properties: size of particles, reaction to magnetic force, or solubility, with 70% accuracy as measured by the teacher.

Experiments With Human Reaction Time

14. The student will construct an hypothesis about which persons or type of person in his class has the quickest reaction time, then test the validity of his hypothesis, to the satisfaction of the teacher.

15. Provided with a Human Reaction Time Device, the student will formulate and test an hypothesis comparing human reaction times to four stimuli: light, sound, touch, and small, to the satisfaction of the teacher.

16. The studen will list, in order of strength, several stimuli he responds to during a typical day, such as alarm clocks, recess bells, the sight of the principal, etc., and will discuss them to the satisfaction of the teacher.

Inferring the Nature of Things Unseen

17. Given 10 "black boxes" and time to study them, the student will infer a description of the interior of each, and list one or two reasons for his inference with 80% accuracy as measured by the teacher.

The Latin Americans

Latin Americans: Who Are They?

18. After studying Unit I in the text Voices of Latin Cultures, and discussing the location of the Latin American Countries, the students will demonstrate their knowledge by labeling the Latin American Countries on a blank outline map of the world with 4 out of 5 items accuracy.

19. After reviewing basic map skills by using Voices of Latin Cultures, pp. 12-13, and various maps, the student will demonstrate his knowledge of these by filling in a crossword puzzle on the geographic terminology, i.e., longitude, latitude, equator, degrees, meridian, hemisphere, with 85% accuracy.

20. To apply his knowledge of the accurate use of maps, the student will demonstrate to the teacher, orally that Mexico is the only Latin American Country north of the equator with 100% accuracy.

21. The student will demonstrate his knowledge of the world's divisions into hemispheres by correctly filling in the Latin American Countries on an outline world map which has been divided into hemispheric zones with 85% accuracy.

22. The student will apply his knowledge of compass directions by looking at a map and answering questions about the locations of the Latin American Countries with 90% accuracy.

The Land of Mexico

23. After reading Voices of Latin Cultures, pp. 14-16, and The Land of Mexico, pp. 5-15; viewing and discussing filmstrips "Mexican Territory", "The Geographic Background of Mexico", the student will apply his knowledge of the Sierra Madre Mt. ranges by correctly labeling the Sierra Madre Oriental, Sierra Madre Occidental, and Sierra Madre del Sur on an outline map of Mexico with 100% accuracy.

24. After listening to the tape "The Land Without a Double" in the kit Viva Mexico, and reading The Land of Mexico, pp. 11-14, and discussing Mexico's "bolsones", the student will demonstrate his knowledge of "bolsones" by drawing a picture of any area with a bolson with 100% accuracy.

25. After reviewing pp. 15-17 in The Land of Mexico, defining "altiplano" and adding it to student dictionary and viewing film "Mexico-Central and Coastlands, Part II," students will apply their knowledge by color-coding the altiplano areas of Mexico on a blank outline map of Mexico with 85% accuracy.

26. The student is to demonstrate his knowledge of the general physical geography of Mexico, by writing a 150 word essay describing the Mexican terrain while viewing a physical relief map of Mexico, as measured by his teacher.

27. The student will demonstrate his knowledge of the political divisions of Mexico as compared to the U.S. by participating in a discussion.

The Lands of Central America and the West Indies

28. The student will apply his knowledge of the political divisions of Central America by color-coding the 6 republics and 1 British Colony on an outline map of Central America with 80% accuracy.

29. After reading Section I, Unit II of Voices of Latin Cultures. and viewing the map in The World Around Us, p. 247, and the film "Central America", the student will demonstrate his kn wledge of "tierra templada" by drawing a diagram and labeling correctly 2 out of 3 geographic climate zones: _____ tierra fria
_____ tierra templada
_____ tierra caliente

30. After making comparisons of the geog aphic zones and climates that exist in Mexico and Central America, the student will write a short paragraph demonstrating his knowledge of the information as measured by the teacher.

31. After working in groups using a wall map of the world and locating the different island groups of the West Indies, the student will demonstrate his knowledge by labeling correctly all 3 island groups on an outline map of Central America and the West Indies.

32. After children have revealed their findings and compared their results regarding the countries that make up the island group, "The Greater Antilles", they will demonstrate orally their knowledge of these countries to the satisfaction of the teacher.

33. After the student has read Life in Latin America, pp. 183-187, has viewed the transparencies: "Mexico Central America", "West Indies", he will apply his knowledge by locating and correctly labeling the two island groups of the Lesser Antilles on an outline map of the West Indies with 100% accuracy.

34. After students have viewed the study prints "The Caribbean Lands", and viewed the map and drawn inferences from The World Around Us, p. 426, the student will apply his knowledge of the different geographic regions and climates of the West Indies by color-coding them on an outline map of the West Indies with 80% accuracy.

The Lands of South America

35. After participating in a class discussion on the location and political divisions of South America, the student will apply his knowledge by drawing an outline of South America within the correct latitude lines with 90% accuracy.

36. After reviewing and discussing the mountainous terrain of South America, the student will apply his knowledge by locating and labeling correctly, the Andes Mountains on an outline map of South America.

37. After reading Voices of Latin Cultures, Section III, Units I, II, III and enter the word "pampas" in their history dictionary, the student will demonstrate his knowledge by orally describing Argentina and Brazil to the teacher's satisfaction.

38. On a dittoed outline map of Brazil the student will demonstrate his knowledge of the three important land formations: Plateau of Mato Grosso, Great Escarpment, and Amazon River Basin by accurately locating 2 out of 3 on a blank outline map of Brazil.

39. After locating Paraguay and Uruguay on a wall map and small outline maps of South America and entering the word "landlocked" to their dictionary, the student will make inferences about the size of these countries in relationship to the other countries of South America by writing a short paragraph demonstrating his knowledge as measured by the teacher.

The Aztecs and Their Ancestors

40. After hearing and reading an introduction to the three major Indian Tribes of Latin America, the student will color-code the location of tribes on a map of Latin America with 90% accuracy.

41. Upon completing the activities for objective #41, the students will, in pairs, correctly complete a retrieval chart of the Olmecs, Teotihuacanos, Zapotecs, Mixtecs, Toltecs in the areas of art, tools, government, money systems, with 70% accuracy.

42. Upon completion of reading the introduction to the Aztec tribe, the students will write a short paragraph telling the general attitude of the Aztec people prior to the building of their great empire, the accuracy to be measured by the teacher's judgement.

43. The student will briefly explain, in writing, the meaning of the term "Crane People" to the teacher's satisfaction.

44. The student will orally explain the social class systems of the Aztecs to the teacher's satisfaction.

45. The student will demonstrate his understanding of the societal roles in Aztec life by listing the responsibilities of the adult men and women, and girls and boys, with 80% accuracy.

46. The student will demonstrate his knowledge of Aztec commerce by drawing and labeling a diagram of the Aztec market and listing some of the rules that governed this activity, to the teacher's satisfaction.

47. After studying the religious aspects of Aztec life, the student will demonstrate his knowledge of the importance of religion in Aztec society by completing a teacher-made crossword puzzle with 80% accuracy (8 out of 10 answers correct).

48. The student will demonstrate his recollection of the contributions made by the Aztecs to the fields of art and science, by drawing in 4 out of 5 contributions on a chart made by the teacher, i.e.,

contributions

Art			
Science			

The Maya Indians

49. The student will correctly color in the areas of settlement of the Maya Indians, with 85% accuracy on a map of Latin America to demonstrate his knowledge of the location of the Maya Civilization.

50. The student will orally demonstrate his knowledge of the reason for the growth and expansion of the Maya Civilization, to the satisfaction of the teacher.

51. The student will demonstrate his knowledge of the religious beliefs of the Maya Indians by answering a fill-in quiz prepared by the teacher with 85% accuracy.

52. The student will demonstrate his knowledge of the location of the Mayan Capital by point it out on a wall map with 100% accuracy.

53. After studying the history of rubber, and it's relationship to the Maya Civilization, the student will apply his knowledge of this great Maya Contribution by writing a paragraph of this subject, the accuracy of which is to be measured by the teacher.

54. The student will apply his knowledge of the differences and similarities of Aztec and Maya religious beliefs by successfully completing 5 out of 7 teacher-prepared questions.

Table 1

Percentage of Kindergarten Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the Areas of Self-Concept, Science and Reading Readiness.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Self-Concept			
1	45	45	100	82	82	100
2	45	45	100	82	82	100
3	16	8	50	81	71	88
4	16	8	50	79	71	90
5	16	7	44	79	69	87
6	2	2	100	67	51	76
7	16	9	56	80	71	89
8	16	8	50	80	80	100
9	16	9	56	81	72	89
10	16	8	50	81	70	86
11	16	9	56	81	73	90
12	16	9	56	81	81	100
13	16	8	50	79	69	87
14	16	5	31	80	59	74
15	2	2	100	50	46	92
16	16	9	56	81	72	89
17	16	5	31	65	29	42
18	16	3	19	65	53	82
19	2	2	100	81	54	69

Table 1 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
20	16	7	44	81	68	84
21	16	9	56	81	80	99
22	16	6	38	81	72	89
23	16	8	50	80	68	85
24	16	8	50	65	56	86
25	16	8	50	65	52	80
26	15	4	27	65	49	75
27	16	7	44	66	59	89
28	16	8	50	80	63	79
29	16	6	38	77	65	82
30	16	6	38	76	55	72
31	16	8	50	65	61	94
32	16	5	31	65	51	78
33	16	5	31	66	51	77
34	16	8	50	66	51	77
35	16	7	44	49	46	94
36	16	4	25	65	37	57
37	16	6	38	69	52	75
38	31	13	42	81	64	79
			Reading Readiness			
39	16	7	44	81	80	99
40	13	5	38	63	62	98
41	-	-	-	35	28	80
42	12	1	08	19	18	95

Table 1 - Con't.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
43				19	11	58
44	12	4	33	47	38	81
45	12	3	25	47	35	74
46	12	3	25	45	34	76
47	12	5	42	61	53	87
48	12	5	42	45	37	82
49	12	5	42	46	37	80
50	12	3	25	46	35	76
51	13	5	38	61	51	84
52	12	3	25	62	57	92
53	12	2	17	61	44	72
54	12	5	45	61	47	77
55	12	5	45	61	52	85
56	12	5	45	62	62	100

Table 2

Percentage of First Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	68	58	85	72	72	100
2	67	48	72	72	70	97
3	57	45	79	72	64	89
4	32	6	19	55	37	67
5	34	15	44	22	13	59
6	50	46	92	55	55	109
7	49	34	69	38	33	87
8	50	40	80	34	27	79
			Social Studies			
9	67	52	78	72	72	100
10	52	28	54	70	42	60
11	52	16	31	71	63	90
12	68	48	71	72	70	97
13	52	30	58	72	69	96
14	52	19	37	57	51	89
15	52	30	58	66	40	61
16	52	42	81	57	56	98
17	67	51	76	71	52	73
18	52	45	87	71	54	76
19	67	44	66	55	48	87
20	52	44	85	71	69	97

Table 2 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	68	56	82	56	50	89
22	48	29	60	21	19	90
23	48	25	52	20	4	20
24	47	18	38	20	5	25
25	47	21	45	20	4	20
26	33	14	42	21	20	95
27	33	27	82	21	17	81
28	48	33	69	21	11	52
29	33	14	42	21	20	95
30	33	29	88	21	19	90
31	33	24	73	5	4	80
32	45	23	51	4	2	50
33	32	14	44	4	3	75
34	17	2	12	-	-	-
35	17	1	6	-	-	-
36	18	18	100	1	1	100
37	17	1	6	1	1	100
38	18	17	94	1	1	100
39	18	18	100	1	1	100
40	17	1	6	1	1	100
41	17	1	6	-	-	-
42	17	1	6	-	-	-
43	17	1	6	-	-	-
44	18	6	33	1	1	100
45	18	18	100	1	1	100

Table 2 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
46	17	2	12	-	-	-
47	18	18	100	1	1	100
48	18	14	78	1	1	100
49	18	15	83	1	1	100
50	18	15	83	1	1	100

Table 3

Percentage of Second Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	53	50	96	95	91	96
2	53	47	89	91	81	89
3	53	47	89	95	89	94
4	29	28	97	58	36	62
5	19	18	95	43	30	70
6	4	1	25	12	11	92
7	14	14	100	29	18	62
8	-	-	-	32	8	25
			Social Studies			
9	53	50	94	95	91	96
10	53	46	87	95	87	92
11	49	40	82	90	80	89
12	50	31	62	95	95	100
13	30	23	77	79	77	97
14	34	29	85	95	89	94
15	41	40	98	87	85	98
16	41	40	98	87	85	98
17	40	37	93	95	74	78
18	54	52	96	95	80	84
19	20	15	75	83	63	76
20	40	34	85	78	69	88

Table 2 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
46	54	29	54	74	60	81
47	54	29	54	74	63	72
48	54	30	56	74	52	70
49	50	23	46	74	57	77
50	54	27	50	74	57	77
51	10	5	50	-	-	-
52	10	5	50	-	-	-
53	4	2	50	-	-	-
54	1	1	100	-	-	-
55	1	1	100	-	-	-
56	4	4	100	-	-	-
57	1	1	100	-	-	-
58	1	1	100	-	-	-
59	1	1	100	-	-	-
60	1	1	100	-	-	-
61	1	1	100	-	-	-
62	1	1	100	-	-	-
63	1	1	100	-	-	-
64	4	4	100	-	-	-
65	4	4	100	-	-	-

Table 2 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	40	36	90	78	73	94
22	20	15	75	78	56	72
23	29	20	69	60	50	83
24	18	17	94	60	43	72
25	49	12	24	43	34	79
26	49	44	90	90	83	92
27	53	42	79	90	79	88
28	50	47	94	90	78	87
29	44	40	91	74	67	91
30	40	29	73	62	50	81
31	29	20	69	62	33	53
32	29	9	31	74	53	72
33	34	24	71	74	60	81
34	54	32	59	74	52	70
35	54	25	46	74	52	70
36	49	41	84	76	62	82
37	20	19	95	37	34	92
38	50	32	64	95	58	61
39	50	43	86	83	69	83
40	40	21	53	66	44	67
41	29	25	86	55	33	60
42	16	15	94	55	36	65
43	16	15	94	60	36	60
44	54	32	59	90	77	86
45	54	31	57	90	76	84

Table 4

Percentage of Third Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	119	112	94	115	97	84
2	119	113	95	96	81	84
3	119	107	90	96	80	83
4	58	17	21	82	59	72
5	39	10	26	81	54	67
6	23	8	35	81	39	48
7	39	7	18	81	53	65
8	79	44	56	84	65	77
			Social Studies			
9	119	113	95	96	83	86
10	119	113	95	115	100	87
11	79	74	94	115	91	79
12	79	77	97	115	96	83
13	119	116	97	115	96	83
14	119	112	94	96	78	81
15	75	9	12	115	86	75
16	79	67	85	115	78	68
17	75	18	24	115	97	84
18	79	74	94	115	100	87
19	119	108	91	69	34	49
20	63	63	100	41	9	22

Table 4 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	44	38	86	20	14	70
22	60	43	72	32	14	44
23	44	25	57	20	15	75
24	44	24	55	20	5	25
25	44	25	57	20	2	10
26	-	-	-	20	2	10

Table 5

Percentage of Fourth Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	94	87	93	94	90	96
2	94	86	91	94	82	87
3	94	84	89	94	83	88
4	70	58	83	94	80	85
5	94	85	90	94	74	79
6	68	57	84	94	60	64
7	94	84	89	94	79	84
8	71	66	93	69	63	91
9	71	65	96	45	38	84
10	22	18	82	45	44	98
11	-	-	-	22	21	95
12	-	-	-	22	21	95
			Social Studies			
13	85	58	68	94	89	95
14	85	59	69	94	83	88
15	85	60	71	94	81	86
16	86	61	71	94	81	86
17	86	62	72	94	86	91
18	86	56	65	94	80	85
19	86	57	66	93	78	84
20	71	63	89	93	74	80

Table 5 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	70	44	63	93	77	83
22	93	61	66	93	86	92
23	93	55	59	68	55	81
24	81	47	58	68	59	87
25	-	-	-	45	30	67
26	-	-	-	46	44	96
27	-	-	-	46	45	98
28		-	-	46	45	98
29	24	14	58	46	45	98
30	-	-	-	46	45	98
31	-	-	-	46	46	100
32	-	-	-	46	44	96
33	-	-	-	71	60	85
34	-	-	-	71	59	70
35	-	-	-	71	49	69
36	-	-	-	71	57	80
37	-	-	-	21	21	100
38	-	-	-	21	20	95
39	-	-	-	46	33	72
40	-	-	-	21	20	95
41	-	-	-	21	20	95
42	-	-	-	21	20	95
43	-	-	-	13	1	08

Table 6

Percentage of Fifth Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	131	100	76	110	108	98
2	131	98	75	110	104	95
3	131	99	76	110	90	82
4	131	97	74	110	85	77
5	107	77	70	87	61	70
6	107	70	65	73	69	95
7	91	73	80	87	81	93
8	91	72	79	85	54	64
9	85	72	84	68	49	72
10	71	60	85	87	71	82
			Social Studies			
11	66	41	62	128	114	89
12	67	51	76	128	107	84
13	83	62	75	109	76	70
14	83	60	72	103	67	65
15	83	61	73	132	119	90
16	83	64	77	126	86	68
17	117	86	74	126	113	90
18	117	74	63	126	114	90
19	117	65	56	87	81	93
20	101	73	72	110	103	94

Table 6 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	101	71	70	68	39	57
22	117	67	57	107	87	81
23	93	54	58	57	38	67
24	93	52	56	78	64	82
25	101	66	65	110	90	82
26	96	71	74	100	72	72
27	96	71	74	101	44	44
28	101	82	81	130	109	84
29	117	91	78	130	105	81
30	72	62	86	95	45	47
31	77	62	81	107	81	76
32	72	62	86	81	52	64
33	72	61	85	68	53	78
34	72	62	86	69	26	38
35	72	62	86	73	29	40
36	77	61	79	105	90	86
37	72	29	40	78	37	47
38	77	27	35	104	87	84
39	72	27	38	91	39	43
40	72	27	38	100	52	52
41	77	25	32	88	55	63
42	72	24	33	89	48	54
43	77	25	32	81	64	79
44	72	24	33	46	20	43
45	72	24	33	89	58	65

Table 6 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
46	77	25	32	94	92	98
47	72	24	33	81	43	53
48	-	-	-	76	67	88
49	5	1	20	77	54	71
50	-	-	-	72	63	88
51	-	-	-	17	1	06
52	-	-	-	17	1	06
53	-	-	-	17	1	06
54	-	-	-	17	1	06
55	-	-	-	17	1	06
56	-	-	-	17	1	06
57	-	-	-	17	1	06
58	-	-	-	17	1	06
59	-	-	-	17	1	06
60	-	-	-	17	1	06
61	-	-	-	17	1	06
62	-	-	-	17	1	06
63	-	-	-	17	17	100
64	-	-	-	17	17	100
65	-	-	-	17	17	100
66	-	-	-	17	17	100
67	-	-	-	17	1	06
68	-	-	-	17	1	06
69	-	-	-	17	1	06
70	-	-	-	17	1	06

Table 7

Percentage of Sixth Grade Students Who Accomplished the Performance Objectives Presented in English and in Spanish in the areas of Science and Social Studies.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
			Science			
1	80	50	63	71	55	77
2	80	62	78	71	65	92
3	50	50	100	71	65	92
4	22	22	100	71	62	87
5	22	19	86	71	59	83
6	22	16	73	71	57	80
7	22	16	73	71	60	85
8	22	15	68	71	56	79
9	22	14	64	71	56	79
10	22	17	77	71	54	76
11	22	17	77	71	54	76
12	22	15	68	71	51	72
13	22	15	68	45	28	62
14	22	15	68	45	22	49
15	22	16	73	45	22	49
16	22	15	68	45	22	49
17	22	16	73	45	18	40
			Social Studies			
18	83	76	92	69	62	90
19	68	55	81	69	54	78
20	83	61	73	69	60	87

Table 7 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
21	83	67	81	69	55	80
22	83	68	82	69	66	88
23	83	71	86	69	60	87
24	50	48	96	69	61	88
25	83	69	83	69	57	83
26	26	19	73	69	61	88
27	22	15	68	69	60	87
28	57	43	75	69	60	87
29	41	34	83	69	60	87
30	22	17	77	69	62	90
31	57	27	47	69	60	87
32	57	30	53	69	63	91
33	57	25	44	69	61	88
34	38	20	53	69	61	88
35	58	27	47	49	42	86
36	42	27	64	23	15	65
37	22	16	73	23	16	70
38	42	23	55	23	16	70
39	42	28	67	23	17	74
40	42	34	83	-	-	-
41	22	16	73	-	-	-
42	22	19	86	-	-	-
43	22	18	82	-	-	-
44	22	19	86	-	-	-
45	42	31	74	-	-	-

Table 7 - Con'd.

Objective Number	Spanish # of Students	Spanish # Obj's. Met	Spanish % Obj's. Met	English # of Students	English # Obj's. Met	English % Obj's. Met
46	42	20	48	-	-	-
47	22	20	91	-	-	-
48	42	24	57	-	-	-
49	42	37	88	-	-	-
50	22	17	77	-	-	-
51	42	21	50	-	-	-
52	42	34	81	-	-	-
53	22	18	82	-	-	-
54	42	21	50	-	-	-

Tables 1 through 7 indicate the number (percentage) of students at the different grade levels who, when tested on the performance objectives, succeeded in meeting those objectives. Not all the students, however, were tested on all the performance objectives list in the tables. As expected, the objectives vary in their degree of difficulty, so that a large percentage of students succeed in meeting some of the performance objectives but failed to meed the performance objectives in other instances. Through a further summation of the data in a later section of this evaluation report, we shall be able to draw attention to the areas in which some of the grade levels are experiencing the most difficulty in meeting the performance objectives.

The detailed data presented for each item in Tables 1 through 7 should be carefully noted by each teacher who has the responsibility of teaching the respective performance objectives. By observing the items which were met by the least percentage of the students, teachers will know where to expand their efforts and increase the number of learning activities. Hopefully, through increased effort on the part of both teachers and students the percentage of students meeting the more difficult performance objectives can be increased.

Ideally, each performance objective should be met by 100 percent of the students. A lesser percentage should cause concern. The implication of securing less than 100 percent of the students meeting the performance objective is that some students, after having received instruction in the learning area, still do not understand the material. Further instruction should be given so that the students can attempt again to master the material and eventually demonstrate their mastery through successfully meeting the performance objective. If this

procedure does not produce the desired result, an alternate implication is that the performance objective is actually beyond the developmental stage of the students and should be revised.

By means of Tables 1 through 7 a report was made on the accomplishment of students at each grade level on each of the performance objectives. The same data can be used to determine the accomplishment of the students in each of the subject matter areas considered separately Bilingual instruction at the kindergarten level covered the areas of self-concept development, science and reading readiness and at grade levels 1 through 6 covered the areas of science and social studies. Table 8 shows the percentage of students at each grade level who met the performance objectives taught and tested in English and in Spanish in each subject matter area.

Table 8

Percentage of Students at Each Grade Level Who Accomplished the Performance Objectives Presented in Each Subject-Matter Area in English and in Spanish.

Grade Level	Self-Concept		Science		Reading Readiness		Social Studies	
	Eng.	Span.	Eng.	Span.	Eng.	Span.	Eng.	Span.
K	.86	.63	.87	.42	.62	.33	-	-
1	-	-	.88	.68	-	-	-	-
2	-	-	.84	.91	-	-	.82	.72
3	-	-	.74	.84	-	-	.74	.81
4	-	-	.85	.89	-	-	.88	.68
5	-	-	.83	.76	-	-	.69	.93
6	-	-	.75	.69	-	-	.86	.72
Area Averages	.86	.63	.82	.74	.62	.33	.80	.74

The figures in Table 8 show that fewer kindergarten and first grade students have been able to accomplish the performance objectives presented in Spanish than the performance objectives presented in English. The same is true of second and fourth grade students in the area of social studies, of fifth grade students in the area of science and of social studies. On the other hand, more second, third and fourth grade students have been able to accomplish the performance objectives when presented in Spanish than when presented in English. Likewise, more third and fifth grade students have been able to accomplish the performance objectives in the area of social studies when presented in Spanish than when presented in English.

Based on the average performance of all the students at all grade levels, it can be said that slightly more students accomplish the performance objectives when presented in English than when the objectives are presented in Spanish. The difference in the number is not great, but it does indicate that more emphasis can be placed upon the Spanish instruction phase of the bilingual program.

In order to study the contribution of the bilingual education program in accommodating students who speak a second language, a design was established to ascertain the accomplishments of the Spanish-based students on the objectives when presented in Spanish and when presented in English. To study the effect of the same program on the accomplishment of English-based students, a similar analysis was made to see how the English-based students performed on the objectives when presented in Spanish and when presented in English.

Table 9 gives a summary of the performance of each of these two distinct groups on the objectives given in Spanish and in English. Listed on the table are the number of students at each grade level

in each language-based group and the number of successful responses given by the students at each grade level. The percentage figure represents the percentage of the students who actually met the performance objectives when presented in Spanish and in English. It should be noted that the number of students, especially of Spanish-based students, is rather small with respect to serving as a representative sample. Few Spanish-based students, as we have defined them, are enrolled in the bilingual education program.

Table 9

Percentage of Spanish-based and English-based Students at Each Grade Level Who Met the Performance Objectives Presented in Spanish and in English.

GRADE	$S_o - S_s$		$E_o - S_s$		$S_o - E_s$		$E_o - E_s$	
	Stu.	Resp.	Stu.	Resp.	Stu.	Resp.	Stu.	Resp.
K	.95 5	68	.99 6	136	.39 39	56	.84 76	267
1	.82 12	116	.83 12	117	.60 57	119	.83 60	96
2	.90 16	169	.73 29	188	.74 38	144	.88 66	234
3	.94 13	84	.98 9	44	.82 106	91	.73 106	106
4	.84 38	73	.83 37	119	.73 56	91	.89 57	147
5	.71 31	190	.73 28	161	.67 100	215	.71 103	268
6	.76 8	27	.84 5	17	.68 112	92	.82 85	118
Averages	.85		.85		.66		.81	

It can be seen from the data given in Table 9 that at all grade levels more Spanish-based students than English-based students accomplish the objectives when the objectives are presented in Spanish. This result is not surprising. However, when the performance objectives are presented in English, more Spanish-based students than English-based students at the kindergarten, third and sixth grade level accomplish them, but at the second, fourth and fifth grade level they accomplish fewer than the English-based students. As a total group, more Spanish-based students than English-based students meet the performance objectives presented in English.

The comparisons made here would seem to indicate that the bilingual program is benefiting the Spanish-based students. Given the opportunity of learning material in his basic language as well as in English, the Spanish-based student is able to master the subject matter more thoroughly and performs, even in English, as well as the students who are English-based.

The English-based students generally meet less of the performance objectives when presented to them in Spanish than when presented in English. The discrepancy between the performance of the English-based students on the objectives in Spanish and the objectives in English is much larger than the discrepancy between the performance of the Spanish-based students on the objectives in Spanish and in English. This would seem to indicate that the English-based students are not benefiting as much from the bilingual education program as the Spanish-based students are. The implication might also be the Spanish instruction phase of the bilingual education program should be emphasized more in order to help improve the performance of the English-based students.

Besides helping the students to master the content of the various subject matter areas, the bilingual education program might also be expected to develop the students' kn wledge of the Spanish language, itself. In order to measure the students' Spanish language development as they progressed through the bilingu a program, it was necessary to use a Spanish test.

It proved impossible to secure a standardized test which related satisfactorily, in the opinion of the teachers, to the type of material and the scope of the Spanish language which had been presented to the students in Stockton's bilingual program. It was decided, therefore, to have the teachers and the teacher-aides in the program construct a Spanish test which would be appropriate for each grade level. Following this procedure gave more assurance that the content of the examination would be related to the Spanish the students had been exposed to in the bilingual program. The items of the test were judged to be sufficiently general in nature so that knowledge of Spanish was being measured rather than knowledge of subject matter. A copy of the Spanish test which was used can be found in Appendix A.

To form a representative sample of the students to whom the Spanish test could be administered, it was decided to select approximately 20 students from each grade level. This number of students was to be comprized of 10 students from Taylor school and 10 students from Washington school. Since the average enrollment at each grade level for all students in the bilingual program is 134 students, a sample comprized of 20 students per grade level seemed to be a fairly representative sample for each group of students. A sample of this size would make it possible to test 15 percent of each grade level's enrollment, i.e., one student from every 6.7 students.

It also seemed reasonable that the effects of the bilingual program upon the development of the students' knowledge of the Spanish language could be ascertained best by testing those students who had been exposed to the program for the longest period of time. In choosing the sample, therefore, the students who had been in the program the longest formed the basic group from which a random sample of 20 students per grade level would be selected. This specification should be kept in mind when one attempts to interpret the results obtained on the Spanish test.

In selecting the representative sample a deliberate attempt was also made to balance the number of English-based students and Spanish-based students. Thus, for each grade level approximately 10 English-based students and 10 Spanish-based students were used to form the total sample of 20 students per grade level. If this proportion could not be secured from each of the two schools, the more students were selected from one school than from the other so that an equal proportion of English-based and Spanish-based students could be maintained in the total sample.

The test was administered through the help of the bilingual program's supervising teacher and of the teacher-aides. Both the scoring and the administration of the test were rather simple since the person administering the test was directed to show the students a set of materials, ask a question and score the response to each item as "good", "fair", or "poor". A score of "good" was given when the student understood the question and answered properly in Spanish; a score of "fair", when the student understood the question but could answer only in English; and a score of "poor", when the student did not understand the question and could not answer.

TABLE 10

Spanish Language Test Responses by a Random Sample of Students in the Bilingual Program at Taylor and Washington Schools.

Grade Level	No. of Students	Total No. of Responses	No. and % of Responses					
			Good		Fair		Poor	
			No.	%	No.	%	No.	%
K	20	271	99	.37	78	.29	94	.35
1	20	329	204	.62	63	.19	62	.19
2	20	299	149	.50	59	.20	91	.30
3	22	298	222	.75	34	.11	42	.14
4	20	239	151	.63	38	.16	50	.21
5	18	200	86	.43	46	.23	68	.34
6	20	190	122	.64	31	.16	37	.20

Table 10 indicates the results obtained by the students on the Spanish test. It can be seen that, as a total group, the students scored with many more "good" answers than with either "fair" or "poor" answers. The desirable proportion of "good" answers to "fair" or "poor" answers is, however, rather weak at the kindergarten, second and fifth grade levels. This would seem to indicate that the students' development of the Spanish language could be given more attention at these respective levels. Perhaps more concentration on vocabulary development and the demonstration of the precise meaning of Spanish expressions is called for at these levels.

In the opinion of the evaluator, the students' development in the knowledge of the Spanish language is not as good as might be expected in view of the types of questions which were presented. The students' performance on the Spanish test raises the entire question of whether sufficient time is being allotted to bilingual instruction in the daily class schedule. To learn a language requires a large amount of practice and exposure to the language. Not much can be expected if these elements are neglected.

As another aspect of measuring the students' performance in the Spanish language, the evaluator proposed to ask a random sample of students a series of questions related to social situations. The questions were formulated and administered by the evaluator, himself, to students who had also been given the Spanish test.

Before hearing the questions, the students were asked whether they spoke Spanish better than English, or English better than Spanish, or English only. This enabled the evaluator to classify them as Spanish-based or English-based. The students were then told to imagine that they were in Mexico and that a child of their age

wanted to speak to them and to become their friend. The students were asked what they would respond if the Mexican child asked them a set of questions. A copy of the actual questions used can be found in Appendix B.

The scoring of the students' responses was again kept rather simple. A score of "good" was earned by understanding the question and by responding properly in Spanish; a score of "fair", by understanding the question, but answering in English; and, a score of "poor" by showing no understanding of the question and by not being able to answer.

Table 11 reports the number of Spanish-based and English-based students presented with the questions, the number of responses each group gave and the quality of the responses.

Table 11

Student Responses to Questions Appraising Competence of Spanish-Based and English-Based Students in the Use of Spanish in Social Situations

A. Spanish-Based

# of Students	Total Responses	Good #	Good %	Fair #	Fair %	Poor #	Poor %
6	84	84	100	0	0	0	0

B. English-Based

# of Students	Total Responses	Good #	Good %	Fair #	Fair %	Poor #	Poor %
23	322	143	.44	20	.06	159	.49

C. Total Student Responses

# of Students	Total Responses	Good #	Good %	Fair #	Fair %	Poor #	Poor %
29	406	227	.56	20	.05	159	.39

The results as shown on Table 11 indicate that the Spanish-based students had no difficulty whatsoever in showing competence in the use of Spanish in social situations, but that the English-based students were much less competent even after having been exposed to the bilingual program -- most of them for a relatively considerable period of time. The results are even less impressive with respect to the competence of the English-based students when one takes into account that many of the students who declared themselves as English-based were actually also acquainted with Spanish to some degree as a consequence of their home background. Those who knew English only as their basic language, but who had been trained in the bilingual program, did extremely poorly as a group in answering the questions. Unfortunately, this latter group had not been classified separately and their scores cannot be shown separately.

The above results would indicate again that bilingual education is benefiting the Spanish-based student but that the program needs much more intensification in time and effort if it is to produce appreciable results for the English-based students.

Use of Materials

In order to conduct an instructional program effectively, appropriate materials must be available for use by the students and the instructional staff. A complete review of the instructional materials used at both Taylor and Washington schools was made by the evaluator with the help of some of the teaching staff engaged in the bilingual program at each of the respective schools.

Table 12 contains a list of the types of instructional materials made available to the bilingual education project. A further description of the materials makes note of (1) the grade levels at which the materials are used; (2) their datedness, i.e., whether the materials are new and being used experimentally or whether their usefulness has been proven over a period of a few years; (3) the learning areas to which they are related; (4) whether they were produced commercially or developed locally; (5) how effective they are in helping students learn; and, (6) whether they need modification in their quality or in their supply.

Table 12

Materials Used in the Bilingual Education Project

Type	Grade Level	Period Of Use	Area	Origin Com.	Origin Local	Effectiveness Po	Effectiveness Fair	Effectiveness Good	Effectiveness Exc.	Modifications Needed
Taylor School										
Science Texts	1	Repeat	Science		X		X			
Reading Charts	1-6	Repeat	Reading	X					X	
Filmstrip w/Records	1-6	Repeat	Lang Dev. Eth. Stud.	X					X	
Geom. Forms	K-2	Repeat	Science	X					X	
Suppl. Rdg. Materials	1-6	Repeat	Rdg. & Soc. Stud.	X			X			Interest Factor
Science Exp. Mat'l.	3-5	Repeat	Science	X					X	More needed w/variety
Bulletin Designs	1-6	Repeat	Science	X					X	More needed
Art Supplies	1-6	Repeat	Soc. Stud. & Science	X					X	More needed w/variety
Test Materials	4-5	Repeat	Soc. Stud.		X	X				Content Change
Science Texts	3-4	Repeat	Science	X					X	
Read. Texts	1-2	Repeat	Read. Devel.	X					X	
Teach. Manuals	K-4	Repeat	Soc. Stud.		X		X			Content Change
Science Kits	1-6	New	Science	X			X			Simplificatio
Read. & Sci. Texts	3	Repeat	Read. & Science	X			X			Simplificatio

Table 12 - Con'd.

Type	Grade Level	Period Of Use	Area	Origin Com.	Origin Local	Effectiveness Poor	Effectiveness Fair	Effectiveness Good	Effectiveness Exc.	Modifications Needed
Suppl. Read. Materials	1-6	Repeat	Reading	X					X	More Supply
Realia	1-6	Repeat	Soc. Stud.	X	X				X	More Supply
			Washington School							
Sci. Tch. Manuals	3	New	Science		X	X				More specification
Soc. Stud. Manuals	K-6	Repeat	Soc. Stud.	X					X	
Sci. Suppl. Read. Mat'ls.	K-2	Repeat	Science	X					X	More Supply
Read. Mat'ls.	K-6	Repeat	Read. Devel.	X					X	More Supply
Sci. & Read. Materials	1-3	Repeat	Science Concepts	X					X	
Learning Games	1-3	Repeat	Reading		X			X		Simplification
Read. Wall Charts	1-4	Repeat	Reading	X					X	More Supply
Learning Games	1-6	Repeat	Science Concepts	X		X				Simplification
Illustr. Dictionary	1-6	Repeat	Word Recogn.	X					X	
Self-Concept Materials	K-1	Repeat	Self-Con. Devel.	X					X	
Records	K-6	Repeat	Read. & Soc. Stud.	X					X	Films & More Supply
Geom. Forms	K-1	Repeat	Science	X					X	More Supply
Learning Centers	K-6	Repeat	All Areas		X				X	More Supply

As seen from Table 12, both Taylor and Washington schools are in need of a further supply of materials in various areas in order to accommodate the number of students involved in the program and to be able to offer students a greater variety of learning experiences. At Taylor school, in the area of science instruction, some of the textbooks need revision, and the materials used for demonstration and experimentation as well as materials for bulletin board displays are needed in greater number and with more variety. A large supply of commercially produced science kits remains unused because the teaching staff has not been instructed in their proper use. More art supplies are also needed so that students can express the science concepts they have developed in the form of visual designs. In the area of social studies, the greatest need is for teacher manuals which offer more detail as to the content to be covered and the procedures to be used. Better tests should also be developed so that concepts taught in social studies can be more accurately measured. In this same area of social studies a larger supply and variety of realia are needed in order to develop the students' appreciation for the products of a culture and its mode of life.

At Washington school, in the area of science, the teacher manuals need revision so that more specification is made as to content to be covered and procedures to be used. The commercially produced learning games for science instruction need further simplification if they are to be used. In the areas of reading and social studies the materials available seem to be rather satisfactory, but are generally needed in greater supply.

Since Taylor and Washington schools share their instructional

materials with each other, a comprehensive list of the materials in the program should be drawn up and posted in the materials centers at both schools. Because Taylor is the larger of the two schools, it also has a larger supply of materials, but the staff at Washington does not feel that it knows fully what is available to them through loan from Taylor. On the other hand, the staff at Washington has concentrated a great deal of effort in the development of learning centers and these could be either reproduced by the Taylor staff, or possibly shared with them.

In general, there also seems to be a need for a greater amount of sequencing of materials in all areas so that proper materials are always available as additional concepts are presented to students. This point relates to curriculum organization as well, for the nature of the materials needed is determined by the concepts presented.

Staff Development

During the 1973-74 school year, the practice followed the previous year of video-taping the teaching staffs' classroom performance was suspended because of the lack of operating equipment. This fact made it impossible to analyze the progress of the staff during the school year through using the steps of video-taping, conferences, modification of classroom behavior and re-taping. It also impeded the double-blind experiment which had been planned for the rating and judging of the teaching staff's improvement.

In order to appraise the qualifications and development of the teaching staff involved in the bilingual education project at Taylor and Washington schools, the evaluator first obtained a complete roster of all teachers and teacher-aides from the bilingual supervising teacher. Members of the staff were then contacted by the evaluator for information regarding their background and experience in the bilingual program. Not all staff members could be reached, but a sufficiently large number were contacted so that they can serve as a representative sample of the staff.

Table 13 presents a summary of the data gathered concerning both the teachers and the teacher-aides. The teachers and teacher-aides are grouped according to their classrooms and grade levels; indication is made of whether or not each staff member is able to speak Spanish; the total number of years of general teaching experience and of bilingual teaching experience is given; and, finally, the number of workshops and in-service training sessions attended is also specified.

Table 13

Bilingual Teaching Staff, Their Qualifications and Bilingual Education Related Experiences

Name	Position	Grade	Spanish-Speaking Yes	Spanish-Speaking No	Yrs. Teach. Experience	Yrs. Bil. Teaching Experience	# of Wrkshp/In-Serv
			Taylor School				
Burton	Teacher	K		x	-	-	-
Kobus	Teacher	K		x	6	2	10
Flores	Aide	K	x		-	-	-
Tom	Teacher	K		x	9	5	1
Weldon	Teacher	K	x		11	4	4
Bryant	Aide	K		x	-	-	-
Wong	Teacher	K		x	-	-	-
Avila	Aide	K	x	-	-	-	-
Craig	Teacher	1	x		5	2	-
Mazzuola	Teacher	1		x	4	4	38
Luke	Aide	1		x	-	-	-
Greathouse	Teacher	1		x	-	-	-
Williams	Aide	1		x	-	-	-
Sylvester	Teacher	1		x	18	4	8
Flores	Aide	1	x		-	-	-
Ludlow	Teacher	1		x	-	-	-
Solima	Aide	1	x		-	-	-

Table 13 - Con'd.

Name	Position	Grade	Spanish-Speaking Yes	Spanish-Speaking No	Yrs. Teach. Experience	Yrs. Bil. Teaching Experience	# of Wrkshp/In-Serv
Genasci	Teacher	2		x	-	-	-
Burrola	Aide	2	x		-	8	10
Palacios	Teacher	2		x	1	1	0
Burrola	Aide	2	x		-	8	10
Legaire	Teacher	2	x		-	-	-
Martinez	Aide	2	x		-	-	-
Romana	Teacher	2		x	6	5	11
Martinez	Aide	2	x		-	-	-
Richard	Teacher	2		x	-	-	-
Galvan	Aide	2	x		-	-	-
Mariano	Teacher	3		x	4	3	2
Olivarez	Aide	3	x		-	8	10
Penn	Teacher	3		x	-	-	-
Casillas	Aide	3	x		2	1	0
Todd	Teacher	3		x	18	4	4
Casillas	Aide	3	x		2	1	0
Harvin	Teacher	3		x	10	3	12
Olivarez	Aide	3	x		-	8	10
Valenzuela	Teacher	3	x		-	-	-
Olivarez	Aide	3	x		-	8	10

Table 13 - Con'd.

Name	Position	Grade	Spanish-Speaking Yes	Spanish-Speaking No	Yrs. Teach. Experience	Yrs. Bil. Teaching Experience	# of Wrkshp/In-Serv
King	Teacher	4		x	-	-	-
Brewer	Aide	4	x		-	2	5
Gehman	Teacher	4		x	17	3	1
Brewer	Aide	4	x		-	2	5
Tays	Teacher	4	x		-	-	-
Monroy	Aide	4	x		-	2	10
Dukes	Teacher	4		x	-	-	-
Brewer	Aide	4	x		-	2	5
Wilbon	Teacher	4-5		x	-	-	-
Monroy	Aide	4-5	x		-	2	10
Ramos	Teacher	5		x	3	1	7
Navarro	Aide	5	x		-	-	-
Critten	Teacher	5		x	6	2	2
Casillas	Aide	5	x		2	1	0
Pool	Teacher	5		x	3	1	0
Navarro	Aide	5	x		-	-	-
Inosanto	Teacher	5		x	7	5	6
Navarro	Aide	5	x		-	-	-
Curtis	Teacher	6		x	11	1	2
Rodriguez	Aide	6	x		3	2	21

Table 13 - Con'd.

Name	Position	Grade	Spanish-Speaking Yes	Spanish-Speaking No	Yrs. Teach. Experience	Yrs. Bil. Teaching Experience	#. of Wrkshp/In-Serv
Uyeda	Teacher	6		x	1	1	4
Munoz	Aide	6	x		-	-	-
Gutierrez	Aide	6	x		-	-	-
Stevens	Teacher	6		x	-	-	-
Monroy	Aide	6	x		-	2	10
Morales	Teacher	6	x		-	-	-
Gutierrez	Aide	6	x		-	-	-
Canepa	Teacher	6	x		-	-	-
Munoz	Aide	6	x		-	-	-
			Washington School				
Lucas	Teacher	1	x		5	5	21
Lucas	Teacher	2	x		5	5	21
Esquivel	Teacher	2	x		13	5	3
Esquivel	Teacher	3	x		13	5	3
Kelley	Aide	3	x		4	4	19
Clegá	Teacher	4		x	-	-	-
Kelley	Aide	4	x		4	4	19
Sims	Teacher	5		x	7	4	10
Kinsman	Aide	5	x		-	-	-
Rendon	Teacher	6		x	-	-	-
Kinsman	Aide	6	x		-	-	-

From Table 13 it can be seen that of a staff of 34 teachers at Taylor schools, 7 teachers are themselves Spanish-speaking, 25 teachers who are not Spanish-speaking do have a teacher-aide who is Spanish-speaking, and 2 teachers who are not Spanish-speaking do not have teacher-aides who are Spanish-speaking. The opportunity for bilingual education is available, therefore, for 30 of the different classroom groups, but there is no such opportunity for 2 of the classroom groups which have neither a Spanish-speaking teacher nor a Spanish-speaking teacher-aide.

At Washington school with a staff of 5 teachers who teach 6 different classroom groups, 2 teachers are themselves Spanish-speaking and the 3 teachers who are not Spanish-speaking do have Spanish-speaking aides to assist them in the bilingual program. Thus, the opportunity for bilingual education is present in each of the 6 classroom groups at Washington.

Based on the representative sample of staff members queried, it can be said that the staff at both schools is an experienced group in the general field of teaching and also in the teaching of bilingual education. At Taylor school the teachers have had an average of 8 years of general teaching experience which includes an average of 3 years of bilingual teaching experience. The bilingual teacher-aides have had an average of 4 years in helping with the bilingual education program.

The data on the workshop and in-service training sessions attended are somewhat questionable in their precision because of the vagueness of the responses received. With this reservation in mind, it can be said that the teachers attended an average of 8 workshops and in-service training sessions during the past two years and the teacher-

aides, an average of 10 such sessions

At Washington school, the teachers have had an average of 8 years of general teaching experience which includes an average of 5 years of bilingual teaching experience. The bilingual teacher-aides have had an average of 4 years in helping with the bilingual education program.

With the same reservations stated above for the Taylor staff, it can be said that the teachers attended an average of 11 workshops and in-service training sessions during the past 2 years and the teacher-aides, an average of 19 such sessions.

In interpreting the average number of years of experience which both the teachers and teacher-aides have had in bilingual education, it should be remembered that the bilingual education project has been offered for some 8 years only in the Stockton Unified School District. Thus, it can be asserted again that both the teacher and the teacher-aides are rather experienced in this field in view of the length of the entire project.

Community Involvement

For the past few years, the Stockton Unified School District has canvassed the feelings of parents, students and staff members on various aspects of the entire school program through a Needs Assessment instrument which is in the form of a questionnaire. This instrument, revised and modified, was used again during the school year, 1973-74. Those parts of the instrument which were felt to have a bearing in some way upon the bilingual education project were included in the body of this evaluation report. Many items within the questionnaire reflect the degree to which there was community involvement in the bilingual program.

Fifty parents with children at Taylor school were randomly selected and asked to complete the questionnaire, and 45 responded; all 92 staff members were asked to complete the questionnaire, and 31 responded. In view of the fact that Taylor school has a total enrollment of approximately 809 students (as based on the computer enrollment print-out of May 5, 1974), the number of parents (38) who responded to the questionnaire represent approximately .02 of the total parent group, the number of students (45) who responded represent about .06 of the total student group, and the number of staff members (31) who responded represent .33 of the total staff group. Twenty-five parents with children at Washington school were randomly selected and asked to complete the questionnaire, and 16 actually responded; 45 students were randomly selected and asked to complete the questionnaire, and 45 responded; and all 26 staff members were asked to complete the questionnaire and 13 responded. In view of the fact that Washington school has a total enrollment of 132 students (as based on the computer enrollment print-out of May 5, 1974), the

number of parents (25) who responded to the questionnaire represent approximately .06 of the total parent group, the number of students (45) who responded represent about .34 of the total student group and the number of staff members (13) who responded represent .50 of the total staff group.

The summary and interpretation of the responses in this evaluation report should always be considered in light of the limited number of responses received, and the question could be legitimately raised as to whether the small number of parents at Taylor (.02) and at Washington (.06) and of students at Taylor (.06) who responded can be regarded as truly representative of the group from which they are taken.

The nature of the items selected from the Needs Assessment Questionnaire and the responses made to these items can be found in Tables 14, 15, and 16 on the following pages. The responses to the items were analyzed statistically so that the opinions of the various groups could be summarized and interpreted.

Needs Assessment - Parent Version

A description of the procedure used in the arrangement of the data gathered through the Parent Version of the Needs Assessment Questionnaire might prove helpful to the reader. Data gathered from parents, with students at Taylor school and Washington school, were first reported separately, not so much for the purpose of forming comparisons but to enable those persons with a particular concern for either one of the schools to identify specific data.

For items Nos. 1 through 21, indication is made of the number of persons responding to each item in each of the schools and the manner in which they responded according to the choices permitted through the form of the questionnaire itself. It will be noted that the categories listed on the questionnaire called for a response of "Yes", "no", and "Not Sure" on each of these items. A summary column was also included so that the general feeling of all parents concerned with the bilingual program both at Taylor and at Washington, could be ascertained. Since a larger number of parents from Taylor school than from Washington school were included in the study, it was felt necessary to weight the responses from each school differently so that the trends in the feelings of the entire parent group could be reported more truthfully. The weight factor assigned to each response was determined by dividing the number of respondents among parents at Taylor school by the number of respondents among parents at Washington school. The number of responses at Taylor school was then multiplied by this factor to increase their value when combined with the responses from Washington school.

For item Nos. 25, 26 and 27, the means were listed for the number of times the parents responding to the questionnaire indicated

that they participated in the activities listed. Again, the data from both schools were reported separately and then compiled together, with appropriate weighting, so that the general level of participation in the entire bilingual program could be ascertained.

For items 29 through 46, the alternatives called for a qualitative statement by the parents. Accordingly, in the quantification of the responses, the most supportive statement was assigned a value of 1; the next most supportive statement, a value of 2; the next most supportive statement, a value of 3, etc. The mean of the percentage of parents who responded to each differentially weighted alternative was calculated so that it could serve as an index of the degree of supportiveness the parents were giving to each item. Again, the data from both schools were summarized with appropriate weighting for each school, so that the general feeling of the parents connected with the bilingual program could be ascertained.

NEEDS ASSESSMENT

Parent Version
(Spring, 1974)

TABLE 14

Item	TAYLOR Respondents #	% Yes	% No	% Not Sure	WASHINGTON Respondents #	% Yes	% No	% Not Sure	Average of Weighted Percentages Yes	No	Not Sur
1. (School Identification)											
2. Should your child's teacher talk with parents more?	38	82	8	11	16	75	19	6	80	11	9
3. Should your child's teacher visit student homes more?	38	63	26	11	16	31	44	25	54	31	15
4. Should the school do more to make parents feel welcome to visit classrooms?	38	82	8	11	16	44	31	25	70	15	15
5. More teachers should attend Parent Advisory Group Meetings.	38	42	0	58	16	63	6	31	48	1	50
6. More parents should attend Parent Advisory Group Meetings.	38	45	0	55	16	81	0	19	56	0	45
7. The Parent Advisory Group has been involved in helping plan the compensatory program.	38	40	0	61	16	44	6	50	41	2	57
8. Most of the parents know about the Compensatory Education Program.	38	29	11	61	16	13	38	50	24	18	57
9. Should a greater effort be made to explain the Compensatory Education Program to parents?	37	30	16	54	16	100	0	0	51	11	38
10. Should the evaluation of the school program be better explained to parents?	37	54	5	41	16	100	0	0	68	4	28
11. Should the school administration do more to inform parents of what is happening at the school?	37	32	41	27	16	88	0	13	49	28	23

EDS ASSESSMENT - Parent Version
Continued

Item	TAYLOR Respondents #	% Yes	% No	% Not Sure	WASHINGTON Respondents #	% Yes	% No	% Not Sure	Average of Weighted Percentages Yes	No	Not Sure
12. More parent education classes are needed. (Adult Education)	37	38	22	41	16	63	0	38	45	15	40
13. More parent involvement in classes is needed.	37	51	5	43	16	100	0	0	66	4	31
14. The Parent Advisory Group membership has been a valuable experience?	37	32	51	16	16	75	0	25	45	36	19
15. Have you had the opportunity to become aware of the Compensatory Education budget for your school?	37	87	11	3	16	38	50	13	72	23	6
16. Have you had the opportunity to become familiar with the Compensatory Education guidelines?	37	89	8	3	16	38	50	13	74	21	4
17. Have you had the opportunity to become familiar with the Compensatory Education program objectives?	37	87	8	5	16	44	44	13	74	19	8
18. Do you know what job positions are available at your school?	36	69	28	3	16	13	69	19	52	40	8
19. Should more parents volunteer to help in the classrooms?	36	47	19	33	16	81	0	19	58	13	29
20. Should more school programs or open house meetings be held?	37	35	38	27	16	69	13	19	45	30	25
21. Do you know the difference between ESL and Bilingual?	38	32	63	5	16	44	38	19	35	56	9

NEEDS ASSESSMENT - Parent Version
Continued

Item	TAYLOR Means	WASHINGTON Means	Average Weighted Means
25. How many of the following have you attended at your school this year?			
a. Open House	1.00	0.00	.70
b. Luncheons	3.00	1.50	2.56
c. PTA Meetings	5.00	2.00	4.11
d. School Programs	2.00	1.50	1.85
e. Parent Workshops	4.00	1.50	3.26
f. Parent Advisory Committee	6.01	3.00	5.11
26. How many times have you visited in the classrooms this year?	3.35	4.00	3.54
27. How many different classrooms have you visited?	2.83	2.78	2.82
28. (Open-ended comments)			

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
29. If something is bothering your child and he doesn't feel like working in school, do his teachers seem to understand?		2.11		2.00	2.08
a. Yes, they are very understanding.	40		19		
b. Yes, they understand most of the time.	26		69		
c. Sometimes they care.	20		6		
d. No, most of the time they don't care.	11		6		
e. No. They never care.	3		0		
30. Do your child's teachers seem to realize how his development during the last year has affected his behavior?		2.11		2.19	2.13
a. Yes, they are very sensitive to this.	40		25		
b. Yes, they are somewhat sensitive.	26		31		
c. Sometimes they notice.	20		44		
d. No, they are not very sensitive.	11		0		
e. No, they don't notice at all.	3		0		
31. Are your child's teachers aware of and do they have respect for cultural differences?		1.97		1.47	1.82
a. Yes, they are very aware and care a lot.	47		60		
b. Yes, they know and care somewhat.	18		33		
c. Sometimes they care.	29		7		
d. No, they don't notice very often.	3		0		
e. No, they don't notice or care at all.	3		0		

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
32. Do your child's teachers seem to know what he needs to learn?		2.19		2.00	2.13
a. Yes, they are very sensitive to his needs.	46		25		
b. Yes, most of them are sensitive to his needs.	14		50		
c. Some of them are sensitive.	22		25		
d. A few of them are sensitive.	14		0		
e. None of them are sensitive.	5		0		
33. Have your child's teachers planned an adequate program to help him with his needs?		2.38		2.36	2.37
a. Yes, they have provided him with a highly individual program.	35		21		
b. Yes, they have given him considerable individual attention.	22		43		
c. They have paid some attention to him.	27		21		
d. They have paid little attention to this program.	3		7		
e. No, they did not develop a special program for him at all.	14		7		
34. Have the school personnel at your child's school attempted to involve you in helping your child learn?		2.30		2.19	2.26
a. Yes, they all have.	24		38		
b. Yes, most of them have.	27		25		
c. Some of them have.	46		25		
d. No, few have.	0		6		
e. No, no one has.	3		6		

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
35. Do you feel that there should be educational training programs to help teachers obtain more effective parent involvement?		2.05		2.63	2.22
a. Yes, this should definitely be done.	51		25		
b. Yes, this should be given high priority.	11		13		
c. This should be done if possible.	24		38		
d. This should be done after all other needs have been met.	8		25		
e. No, this should not be done at all.	5		0		
36. Do you feel that the school should work harder to inform parents and others in the community about what it is doing?		2.32		2.31	2.32
a. Yes, they should work much harder.	27		6		
b. Yes, they should spend more time on it.	29		63		
c. They should give it some time.	35		25		
d. Little time should be given to this.	3		6		
e. No time should be spent on this.	6		0		
37. Do your child's teachers know different ways of teaching him?		2.22		2.38	2.27
a. Yes, they all know different ways.	47		13		
b. Most of them know different ways.	9		44		
c. Some of them know different ways.	28		38		
d. A few of them know different ways.	6		6		
e. None of them know different ways.	9		0		

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
38. Do your child's teachers know how to evaluate what they are doing?		2.15		2.06	2.12
a. Yes, they all know.	39		31		
b. Yes, most of them know.	24		44		
c. Some of them know.	24		13		
d. A few of them know.	6		13		
e. None of them know.	6		0		
39. My child's teacher is able to help students appreciate and accept cultural differences among the students at school.		2.78		1.74	2.37
a. Yes, very capable.	11		50		
b. Yes, rather capable.	19		25		
c. Capable, but not exceptionally so.	8		13		
d. No, not too capable.	17		6		
e. No, not capable at all.	6		0		
f. I have no basis for judgment.	39		6		
40. My child's teacher is able to sensitize the rest of the faculty to the unique linguistic and cultural characteristics of the non-English-speaking children.		2.53		2.00	2.21
a. Yes, very capable.	6		25		
b. Yes, rather capable.	6		25		
c. Capable, but not exceptionally so.	6		13		
d. No, not too capable.	0		6		
e. No, not capable at all.	3		0		
f. I have no basis for judgment.	81		31		

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
41. My child's teacher seems to know how to handle bilingual education effectively.		1.16		1.60	1.36
a. Yes, is very effective.	8		38		
b. Yes, is rather effective.	11		19		
c. Effective, but not exceptionally so.	3		0		
d. No, is not too effective.	3		6		
e. No, is not effective al all.	8		0		
f. I have no basis for judgment.	68		38		
42. My child's teacher seems to be competent in both languages used in the bilingual program (if given in your school).		2.75		1.91	2.45
a. Yes, very competent in both languages.	11		25		
b. Yes, sufficiently competent in both languages.	16		31		
c. Competent in one language, but not very competent in the second language.	3		6		
d. Competent in one language, but not competent at all in the second language.	24		6		
e. I have no basis for judgment.	47		31		
43. My child's teacher's aide seems to be competent in both languages used in the bilingual program (if given in your school).		2.50		1.89	2.32
a. Yes, very competent in both languages.	11		25		
b. Yes, sufficiently competent in both languages.	21		19		
c. Competent in one language, but not very competent in the second language.	13		6		
d. Competent in one language, but not competent at all in the second language.	13		6		
e. I have no basis for judgment.	42		44		

Item	TAYLOR Percent	TAYLOR Weighted Means	WASHINGTON Percent	WASHINGTON Weighted Means	Average of Weighted Means
44. Do you feel that the teacher understands the cultural background of your child and of your family?		3.30		2.00	2.89
a. Yes, understands it very well.	5		25		
b. Yes, understands it rather well.	16		19		
c. Understands, but not exceptionally so.	11		25		
d. Understands a little only.	14		0		
e. Does not understand it at all.	16		13		
f. I have no basis for judgment.	38		19		
45. Does the school environment reflect the influence of your ethnic group in the education program?		2.38		2.60	2.42
a. Yes, very much.	22		14		
b. Yes, sufficiently.	38		14		
c. Some, but not very much.	30		29		
d. Only a little.	3		14		
e. No, not at all.	8		29		
46. Do you feel that classes taught exclusively in English are adequate for educating children whose native tongue is another language?		2.39		2.70	2.48
a. They handicap the children very much and are unfair.	28		23		
b. They are a slight handicap, but not serious.	22		15		
c. They do not handicap the children because they quickly learn English when they have to.	33		31		
d. They do not handicap the children because all children should be forced to learn English when they go to school.	17		31		

Interpretation of the Data Found in the Parent Version of the Needs Assessment Questionnaire

For items 2 through 21, it is assumed that a definite trend in the feelings of the parents exists when more than 75 percent of the respondents answer the item in the same way. It is the evaluator's purpose here to draw attention to the items of concern to many of the parents at each of the schools and to all the parents in general. Most parents at Taylor school generally feel that:

1. teachers should talk with parents more.
2. the school should do more to make parents feel welcome to visit classrooms, and
3. parents should be given more opportunity to become aware of the Compensatory Education budget for the school and of the program's guidelines.

Most parents at Washington school feel that:

1. teachers should talk more with parents,
2. more parents should attend the Parent Advisory Group meetings,
3. greater effort should be made to explain the Compensatory Education Program to parents,
4. the evaluation of the school program should be better explained to parents,
5. the school administrators should do more to inform parents of what is happening at school,
6. more parent involvement in classes is needed, and
7. the Parent Advisory group membership is a valuable experience.

There are sufficient respondents at each of the separate schools to indicate that parents, as a total group, connected with the bilingual program are concerned with one principal point, i.e., that the teachers should talk more with parents.

The true significance of the responses to item Nos. 25 through 27 becomes clearer if one keeps in mind the responses made to the

previous items, Nos. 2 through 21. It is evident that parents became involved more in those school activities which are of an informative nature. Thus, the greatest attendance by parents was shown at Parent Advisory Committee meetings, at P.T.A. meetings and at Parent Workshops, with their average times of attendance being 5.11, 5.11 and 3.26, respectively. The average number of visits to classrooms was also rather high, i.e., 3.54, and this figure could have been even higher if parents were made to feel more welcomed to the classrooms. Since the parents at both Taylor school and Washington school followed the same trend as the composite parent group on these particular items, there is no need here to make special mention of their separate averages.

For item Nos. 29 through 46, a perfectly supportive response would have been indicated through a weighted mean of 1.00; an entirely unsupportive response, through a weighted mean of 4.00 or 5.00, depending upon the number of alternatives listed for each item. In the opinion of the evaluator, which is based upon the general distribution of the responses, an item reached a satisfactory degree of supportiveness when the weighted means resulted in a figure from 1.00 to 2.05. Correspondingly, an item showed a lack of parental supportiveness when the weighted means reached a figure of 2.50 or above. Guided by this interpretation, the following statements can be made.

Parents at Taylor are most supportive in responding to the items which state that:

1. teachers are aware and respect the cultural differences of the children,
2. there should be educational training programs to help teachers obtain more effective parent involvement, and

3. teachers seem to know how to handle bilingual education effectively.

Parents at Washington are most supportive in responding to the items which state that:

1. teachers seem to understand if something is bothering the child and it doesn't feel like working in school,
2. teachers are aware of and have respect for cultural differences,
3. teachers seem to know what the child needs to learn,
4. teachers are able to help students appreciate and accept cultural differences among the students at school,
5. teachers are able to sensitize the rest of the faculty to the unique linguistic and cultural characteristics of the non-English-speaking children,
6. teachers seem to know how to handle bilingual education effectively,
7. teachers seem to be competent in both languages used in the bilingual program,
8. teacher-aides seem to be competent in both languages used in the bilingual program, and
9. the teachers understand the cultural background of the child and its family.

Parents as a total group connected with the bilingual program are most supportive in responding to the items which state that:

1. teachers are aware of and respect the cultural differences of the children,
2. teachers seem to know how to handle bilingual education effectively.

Parents at Taylor are least supportive in responding to the items which state that:

1. teachers are able to help students appreciate and accept cultural differences among the students at school,
2. teachers are able to sensitize the rest of the faculty to the unique linguistic and cultural characteristics of the non-English-speaking children,

3. teachers seem to be competent in both languages used in the bilingual program,

4. teacher-aides seem to be competent in both languages used in the bilingual program, and

5. teachers understand the cultural background of the child and its family.

Parents at Washington are least supportive in responding to the items which state that:

1. there should be educational training programs to help teachers obtain more effective parent involvement,

2. the school environment reflects the influence of the ethnic groups in the education program, and

3. classes taught exclusively in English are adequate for educating children whose native tongue is another language.

Parents as a total group connected with the bilingual program arrive at a degree of unanimity in being least supportive in their responses to only one item, i.e., that the teachers understand the cultural background of the children and their families.

Needs Assessment - Student Version

The Student Version of the Needs Assessment Questionnaire for the spring of 1974, contains basically two types of items: (1) those items, Nos. 1 through 16, which ask for a qualitative answer to a single statement or question, and (2) those items, Nos. 17 through 23, which ask for a judgment on discrete aspects of a topic. Table 15 lists the type of responses given to each item.

Data gathered from Taylor school and Washington school were first kept separate, not for the sake of comparing the two schools, but so that persons with a particular concern for either of the schools could identify specific data readily. The data from both schools was also combined in order to indicate the global opinions of all students involved in the bilingual program. Since the same number of students from each of the schools responded to the items, there was no need to weigh the responses from each school differently before combining them into a total figure.

For item Nos. 1 through 11, the alternatives listed within the item called for a qualitative statement concerning the principal statement or question. In the quantification of these responses, the most supportive type of response was assigned a value of 1; the next most supportive response, a value of 2; etc. The percentage of students who responded to each of the alternatives within an item was multiplied by the value assigned to each alternative and a mean for the value of all responses was drawn. A perfectly supportive response on the part of all students would be indicated through a mean of 1.00; and entirely unsupportive response, through a mean of 5.00.

NEEDS ASSESSMENT

Student Version
(Spring, 1974)

TABLE 15

Item	TAYLOR Percent Responding	TAYLOR Weighted Mean	WASHINGTON Percent Responding	WASHINGTON Weighted Mean	Average of Weighted Means
1. If something is wrong and you don't feel like working, do your teachers seem to understand?		2.24		1.69	1.97
a. Yes, they all are very understanding.	15		53		
b. Yes, most understand.	56		25		
c. Some care.	21		22		
d. No, most of the time they don't care.	9		0		
e. No, they never care.	0		0		
2. Do your teachers notice how you have changed during the year?		2.00		2.22	2.11
a. Yes, they have really noticed.	32		28		
b. Yes, most seem to have noticed.	44		39		
c. Some have noticed.	18		22		
d. No, not many have noticed.	3		6		
e. No, they haven't noticed anything.	3		6		
3. Do your teachers know how to teach students of different ethnic backgrounds?		1.85		1.58	1.72
a. Yes, all know and care a lot.	38		56		
b. Yes, most know and care.	38		36		
c. Sometimes some care.	24		6		
d. No, almost none care.	0		0		
e. No, none.	0		3		
4. My teachers know what problems I have in learning.		2.50		2.17	2.34
a. Yes, they all know my problems.	24		31		
b. Yes, most know my problems.	32		31		
c. Some know of my problems.	27		33		
d. No, few know my problems.	6		3		
e. No, none know my problems.	12		3		

Item	TAYLOR Percent Responding	TAYLOR Weighted Mean	WASHINGTON Percent Responding	WASHINGTON Weighted Mean	Average of Weighted Means
5. My teachers know how to help me learn when I have a problem.		1.56		1.53	1.55
a. Yes, all help with problems.	68		67		
b. Yes, most help with problems.	9		17		
c. Yes, some help with problems.	24		14		
d. No, very few help with problems.	0		3		
e. No, they don't know how to help me.	0		0		
6. The school and my parents work together to help me learn.		2.03		2.08	2.06
a. Yes, all the time.	30		47		
b. Yes, most of the time.	46		19		
c. Some of the time.	15		17		
d. No, not very often.	9		11		
e. No, not at all.	0		6		
7. My teacher's really work to get my parents to come to school.		1.88		2.14	2.01
a. Yes, a lot do.	35		39		
b. Yes, some do.	44		25		
c. Once in a while, some work.	18		25		
d. No, hardly any do.	3		6		
e. No, none at all work.	0		6		
8. My teachers try to let my parents know what is happening at school.		1.65		1.56	1.61
a. Yes, all the time.	59		67		
b. Yes, most of the time.	24		19		
c. Some of the time.	12		6		
d. No, not very often.	6		8		
e. No, not at all.	0		0		

Item	TAYLOR Percent Responding	TAYLOR Weighted Mean	WASHINGTON Percent Responding	WASHINGTON Weighted Mean	Average of Weighted Means
9. My teachers know different ways to help students learn.		1.59		1.58	1.59
a. Yes, they all know a lot of ways.	53		61		
b. Yes, most know some ways.	35		25		
c. They know a few ways.	12		11		
d. No, few know very many ways.	0		0		
e. No, they only know one way.	0		3		
10. My teachers know how to tell if they are doing a good job of teaching.		1.85		2.03	1.94
a. Yes, they all know a lot of ways of finding out.	44		42		
b. Yes, most know some ways.	32		25		
c. They know a few ways.	21		28		
d. No, few know very many ways.	0		0		
e. No, they can't tell at all.	3		6		
11. Do your teachers seem to understand you?		2.18		2.03	2.11
a. Yes, they all understand me.	21		7		
b. Yes, most understand me.	50		39		
c. Some understand me.	24		25		
d. No, not many understand me.	3		31		
e. No, none understand me.	3		6		

Item	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
12. Which way of presenting new ideas help you learn the best?			
a. Listening - Tape Recorders	32	53	43
b. Seeing - Blackboard, Movies	62	31	46
c. Working with your hands - Puzzles, Games	6	17	11
13. Do you learn best by:			
a. The whole class working together.	9	22	16
b. Working in small groups.	47	36	42
c. Working by yourself.	44	42	43
14. Do you learn best by:			
a. Having the teacher plan the activities.	41	61	53
b. Making some choices.	27	19	23
c. Deciding yourself what you need to learn and how to learn it.	29	19	24
15. When you do a good job, what makes you feel the best?			
a. Getting a present such as a button, money or candy.	9	25	17
b. Getting to choose what to do.	21	6	13
c. Having the teacher smile or tell others how well you did.	12	8	10
d. Having a note sent home to parents about how well you did.	41	22	32
e. The pleasure of knowing I did a good job is all I need.	18	39	28
16. Do you learn best by:			
a. Practicing over and over.	62	36	49
b. Practicing only to make sure I have the idea.	27	22	24
c. Exploring new ideas.	12	42	27

Item	TAYLOR Average #	WASHINGTON Average #	Taylor & Washington Average #
17. How many of your friends speak:			
a. No English	0.00	1.00	.50
b. Little English	1.00	2.00	1.50
c. English and Spanish	2.75	3.00	2.88
d. English and Filipino	3.00	0.00	1.50
e. English and Chinese	3.00	5.00	4.00
	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
18. Bilingual Education is:			
a. Teaching in a foreign language (i.e., Spanish, Chinese, Filipino, etc.).	38	6	22
b. Teaching the same class material twice, once in English and once in a second language.	44	31	37
c. Teaching only non-English speaking children in their own language.	3	25	14
d. Teaching in two languages, one of which is English to all children.	15	39	27
19. How important do you think bilingual education should be in the entire school district?			
a. It should be offered to all students in all schools.	41	58	50
b. It should be offered to all non-English speaking students in all schools.	9	11	10
c. It should be offered to all students with parents and students deciding to be in such classes.	38	14	26
d. It should be offered only in schools which have many non-English speaking students.	9	3	6
e. It should not be offered in any school and all students should be forced to learn English right away.	3	14	8

Item	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
20. If bilingual education should be taught at:			
a. Kindergarten through grade 1 only.	0	6	3
b. Kindergarten through grade 3 only.	9	15	13
c. Kindergarten through grade 6 only.	18	33	26
d. Kindergarten through grade 9 only.	23	9	16
e. Kindergarten through grade 12.	36	6	21
f. Pre-kindergarten through grade 12.	14	30	22
g. Other	0	0	0
21. What do you feel are the minimum requirements of the teacher and aide in order to teach in bilingual education programs?			
a. Teacher must be bilingual and aide may be only English speaking.	5	22	13
b. Teacher may be English speaking only but aide must be bilingual.	55	28	41
c. Teacher and aide must be bilingual.	41	50	46
22. Bilingual education is good for English-speaking students because:			
a. It helps children to appreciate other cultures and to get along better with their non-English-speaking classmates.	31	42	37
b. It helps them understand their own language better.	9	19	14
c. It will help them learn a second language.	34	22	28
d. It makes them more educated.	3	14	9
e. It prepares them for travel to foreign countries someday.	22	3	12

NEEDS ASSESSMENT - Student Version
Continued

Item	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
23. Bilingual education is good for non-English-speaking students because:			
a. It gives the child a greater opportunity to learn in school.	21	36	29
b. It shows respect for the child and his language.	21	19	20
c. It helps develop the child's knowledge of his own native language.	9	19	14
d. It helps learn what his classmates are learning in his own language while learning to speak English.	27	25	26
e. Other	21	0	11

Interpretation of the Data Found in the Student Version of the Needs Assessment Questionnaire

In view of the total distribution of responses, an item received a high degree of supportiveness when the mean value of all the responses to the item resulted in a figure from 1.00 to 1.67. Correspondingly, a lack of supportiveness was indicated when the mean value of all the responses to the item reached 2.10 or above. Based on this interpretation, the following statements can be made.

Students at Taylor are most supportive in responding to the items which state that:

1. teachers know how to help them learn when they have a problem,
2. teachers try to let parents know what is happening at school, and
3. teachers know different ways to help students.

Students at Washington are most supportive in responding to the items which state that:

1. teachers know how to teach students of different ethnic backgrounds,
2. teachers know how to help them learn when they have a problem,
3. teachers try to let parents know what is happening at school, and
4. teachers know different ways to help students learn.

Students as a total group from both schools are most supportive in responding to the items which state that:

1. teachers know how to help them learn when they have a problem,
2. teachers try to let parents know what is happening at school, and
3. teachers know different ways to help students learn.

Students at Taylor are least supportive in responding to the items which state that:

1. teachers seem to understand if something is wrong and you don't feel like working,
2. teachers know what problems the children are having in learning, and
3. teachers seem to understand the children.

Students at Washington are least supportive in responding to the items which state that:

1. teachers notice how children have changed during the year,
2. teachers know what problems the children are having in learning, and
3. teachers really work to get parents to come to school.

Students as a total group from both schools are least supportive in responding to the items which state that:

1. teachers notice how the children have changed during the year,
2. teachers know what problems the children are having in learning, and
3. teachers seem to understand the children.

Unfortunately, the opinions of the students as measured through the questionnaire seem to be contradictory at times. In one instance, for example, the children feel that "teachers know how to help them learn", but in another instance they feel that "teachers do not know what problems the children are having in learning". The inference from such contradictory statements might be that the items themselves are ambiguous for the students, or that the children are expressing nuances through their responses which deserve to be studied carefully for their true meaning.

On item Nos. 12 through 23, the students were asked to make a judgment on discrete aspects of a topic. The most meaningful way of interpreting the variation of responses given by the students would seem to be that of noting which responses were subscribed to by the largest percentage of the students. A word of caution should be mentioned, however, with respect to the interpretation of this data since the responses were often quite evenly spread over all the possible alternative responses and no large degree of unanimity appeared in the selection of any of the responses. With such reservations held in mind, the following observations can be made:

1. The largest percentage of students at Taylor school felt that they are helped to learn new ideas better if seeing is involved (e.g., blackboard, movies,); but at Washington school the largest percentage favor listening as the means of learning new ideas.

2. At both Taylor and Washington schools the largest percentage of students feel they learn best when working in small groups or by themselves.

3. At both Taylor and Washington schools the largest percentage of students feel they learn best when the teacher plans the activities for them.

4. There is a rather even dispersion of opinion among the students on the question of what type of reward makes them feel best when they have done a good job.

5. The largest percentage of students at Taylor school feel that they learn best by practicing over and over. At Washington school, opinions of students are rather evenly dispersed on the question of whether they learn best by repeated practice or by being able to explore new ideas.

6. Children at both Taylor and Washington perceive that there are more of their schoolmates who speak English and Chinese than those who speak no English, little English, or English and some other second language.

7. The largest percentage of children at both schools view bilingual education as meaning that the same class material is taught twice, once in English and once in a second language.

8. The largest percentage of children at both schools think

that bilingual education should be offered to all students in all schools throughout the district.

9. There appears to be no unanimity among the students on the matter of the grade level at which bilingual education should be taught.

10. The largest percentage of the students at both schools feel that both the teacher and the teacher-aides must be bilingual in the offering of a bilingual program.

11. At Taylor, the largest percentage of the children see bilingual education as beneficial for the English-speaking student because it will help them learn a second language. At Washington, the benefit is viewed as helping the English-speaking student appreciate other cultures better and getting along better with their non-English-speaking classmates.

12. There is an even dispersion of opinion on the question of the benefits derived by the non-English-speaking student from the bilingual education. It should be note, however, that the largest percentage of students at Washington believe that bilingual education helps the non-English-speaking student most by giving him a greater opportunity to learn in school.

Needs Assessment - Staff Version

The Staff Version of the Needs Assessment Questionnaire in its entirety, includes questions relevant to the bilingual program, but also includes many other questions pertaining to other school matters. In this report the evaluator has selected out for analysis only those items which relate in some way to the bilingual program. The nature of the items thus selected and the responses made to these items can be seen in Table 16.

Data gathered from Taylor school and Washington school were first reported separately not so much for the purpose of forming comparisons, but rather to enable those persons with a particular concern for either one of the schools to identify specific data. The data from the two schools were also compiled together so that the global opinions of all the staff members involved in the bilingual program could be ascertained.

For item Nos. 1 through 20, indication is made of the number of persons responding to each item and the manner in which they responded according to the choices permitted through the form of the questionnaire itself. It will be noted that the categories listed on the questionnaire called for a response of "Yes", "No", and "Not Sure" on each of the items.

Since a larger number of staff members from Taylor school (31) than from Washington school (13) responded to the questionnaire, it was felt necessary with respect to item Nos. 1 through 20, to weight the number of responses from each school differently when combining the data from the two schools. The weight factor assigned to each response was determined by dividing the number of respondents to each

item from Taylor school by the number of respondents to each item from Washington school. The number of responses at Taylor school was then multiplied by this factor to increase their value when combined with the number of responses from Washington school.

NEEDS ASSESSMENT

Staff Version
(Spring, 1974)

TABLE 16

Item	TAYLOR Respondents #	% Yes	% No	% Not Sure	WASHINCTON Respondents #	% Yes	% No	% Not Sure	Average of Weighted Percentages Yes	No	Not Sure
1. Should your child's teacher talk with parents more?	30	43	33	23	12	92	0	8	57	24	19
2. Should your child's teachers visit student homes more?	21	43	43	14	12	75	0	25	55	27	18
3. Should the school do more to make parents feel welcome to visit classrooms?	29	66	28	7	12	92	0	3	73	20	6
4. More teachers should attend parent advisory group meetings?	31	52	32	16	12	50	42	8	51	35	14
5. More parents should attend parent advisory group meetings?	29	90	3	7	12	92	8	0	90	5	5
6. The parent advisory group has been involved in helping plan the Compensatory Education Program?	28	46	11	43	13	85	0	15	59	7	30
7. Most of the parents know about the Compensatory Education Program?	31	7	42	52	13	8	15	77	7	34	59
8. Should a greater effort be made to explain the Compensatory Education Program to parents?	28	79	0	21	12	92	0	8	83	0	17
9. Should the evaluation of the school program be better explained to parents?	29	72	10	17	13	85	0	15	76	7	17
10. Should the school administration do more to inform parents of what is happening at the school?	31	71	19	10	13	85	15	0	75	18	7
11. More parent education classes are needed? (Adult Ed.)	30	70	10	20	13	62	15	23	67	12	21

Item	TAYLOR Respondents #	% Yes	% No	% Not Sure	WASHINGTON Respondents #	% Yes	% No	% Not Sure	Average of Weighted Percentages Yes	No	Not Sure
12. More parent involvement in classes is needed?	30	67	3	30	13	77	15	8	70	7	23
13. The parent advisory group membership has been a valuable experience?	28	25	29	46	9	67	11	22	35	24	41
14. Have you had the opportunity to become aware of the Compensatory Education budget for your school?	24	69	24	7	13	92	8	0	77	18	16
15. Have you had the opportunity to become familiar with the Compensatory Education guidelines?	30	83	7	10	13	85	15	0	84	9	7
16. Have you had the opportunity to become familiar with the Compensatory Education Program objectives?	28	89	11	0	13	85	15	0	88	12	0
17. Do you know what job positions are available at your school?	30	53	37	10	13	77	23	0	60	32	7
18. Should more parents volunteer to help in the classrooms?	31	68	7	26	13	85	15	0	73	9	18
19. Should more school programs or open house meetings be held?	29	28	38	35	12	42	25	33	32	34	34
20. Most of your contacts with the schools were positive?	24	67	8	25	11	91	9	0	74	9	17

Item	TAYLOR		WASHINGTON		Average	
	Average # of pupils exhibiting condition	Average # of pupils for whom condition impedes learning	Average # of pupils exhibiting condition	Average # of pupils for whom condition impedes learning	Exhibiting	Impeded
21. Low Self Concept	3.41	3.33	2.40	4.00	2.90	3.67
22. Lack of Confidence	3.20	3.21	2.86	2.00	3.03	2.60
23. Unsatisfactory Peer Relations	3.64	4.15	2.60	2.50	3.12	3.33
24. Hostility toward different Ethnic groups	3.00	2.57	1.00	1.00	2.00	1.79
25. Poor interpersonal communications	3.00	3.50	2.00	2.50	2.50	3.00
26. Disinterested in cultural differences	2.33	3.20	0.00	0.00	1.16	1.60

Item	TAYLOR Average # of students (per class)	WASHINGTON Average # of students (per class)	Total average # of students (per class)
27. How many of your students:			
a. Speak no English	1.25	1.00	1.13
b. Speak little English	2.20	1.71	1.96
c. Speak English and Spanish	4.25	4.50	4.38
d. Speak English and Filipino	2.39	0.00	1.20
e. Speak English and Chinese	1.00	0.00	.50
f. Speak English and other	0.00	0.00	0.00
g. Speak English only	5.00	8.67	6.54

	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
28. Bilingual Education is:			
a. Teaching in a foreign language only (i.e. Spanish, Chinese, Filipino, ect.)	3	0	3
b. Teaching the same class material twice, once in English and once in a second language.	50	90	70
c. Teaching only non-English speaking children in their own language.	3	0	2
d. Teaching in two languages, one of which is English to all children.	44	9	26
29. How important do you think bilingual education should be in the entire school district?			
a. It should be offered to all students in all schools.	16	50	33
b. It should be offered to all non-English speaking students in all schools.	3	25	10

Item	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
30. Continued			
c. It should be offered to all students with parents and students deciding to be in such classes.	52	25	38
d. It should be offered only in schools which have many non-English speaking students.	19	0	9
e. It should not be offered in any school and all students should be forced to learn English right away.	9	8	9
31. If bilingual education is offered at school it should be offered at:			
a. kindergarten through grade 1 only	4	0	2
b. kindergarten through grade 3 only	0	0	0
c. kindergarten through grade 6 only	19	25	22
d. kindergarten through grade 9 only	4	0	2
e. kindergarten through grade 12	19	25	22
f. pre-kindergarten through grade 12	12	25	18
g. other	42	25	21
32. What do you feel are the minimum requirements of the staff in order to be involved in bilingual education programs?			
a. Teacher must be bilingual and aide may be only English speaking.	19	8	14
b. Teacher may be English speaking only but aide must be bilingual.	38	67	52
c. Teacher and aide must be bilingual.	44	25	34

Item	TAYLOR % Responding	WASHINGTON % Responding	Average % Responding
33. If you agree to bilingual education for English-speaking children, what do you think its greatest value is?			
a. It helps children to appreciate other cultures and to get along better with their non-English speaking schoolmates.	29	69	49
b. It helps them understand their own language better.	14	0	7
c. It will help them learn a second language.	36	31	33
d. It makes them more educated.	4	0	2
e. It prepares them for travel to foreign countries someday.	0	0	0
f. Other	18	0	9
34. If you agree to bilingual education for non-English speaking children, what do you think its greatest value is?			
a. It gives the child a greater opportunity to learn in school, just like his English-speaking classmates.	17	17	17
b. It shows respect for the child and his language.	31	17	24
c. It helps develop the child's knowledge of his own native language.	10	0	5
d. It helps the child learn what his classmates are learning in his own language while learning to speak English.	24	67	45
e. Other	17	0	9

Interpretation of the Data Found in the Staff Version of the Needs Assessment Questionnaire

For item Nos. 1 through 10, it is assumed that a definite trend in the feelings of staff members exists when more than 75 percent of the respondents answer the item in the same way. It is the evaluator's purpose here to draw attention to the items of concern to many of the staff members at each of the schools and to all staff members in general.

Most staff members at Taylor school feel that:

1. more parents should attend Parent Advisory Group meetings,
2. greater effort should be made to explain the Compensatory Education Program to parents,
3. they, themselves, have had the opportunity to become familiar with the Compensatory Education guidelines, and
4. they, themselves, have had the opportunity to become familiar with the Compensatory Education Program objectives.

Most staff members at Washington school feel that:

1. teachers should talk with the children's parents more,
2. teachers should visit the children's homes more,
3. the school should do more to make parents feel welcome to visit classrooms,
4. more parents should attend Parent Advisory Group meetings,
5. the Parent Advisory Group has been involved in helping plan the Compensatory Education Program,
6. a greater effort should be made to explain the Compensatory Education Program to parents,
7. the evaluation of the school program should be better explained to parents,
8. the school administration should do more to inform parents of what is happening at school,
9. there is a need for more parent involvement in classes,
10. they, themselves, have had the opportunity to become aware of the Compensatory Education budget for the school,

11. they, themselves, have had the opportunity to become familiar with the Compensatory Education guidelines,

12. they, themselves, have had the opportunity to become familiar with the Compensatory Education Program objectives,

13. they know what job positions are available at their school,

14. more parents should volunteer to help in the classroom, and

15. most of their contacts with the school were positive.

There are sufficient respondents at each of the schools to indicate that the staff members, as a total group, feel that:

1. more teachers should attend Parent Advisory Group meetings,

2. more parents should attend Parent Advisory Group meetings,

3. a greater effort should be made to explain the Compensatory Education Program to parents,

4. the evaluation of the school program should be better explained to parents,

5. the school administration should do more to inform parents of what is happening at the school,

6. they, themselves, have had the opportunity to become aware of the Compensatory Education budget for their school,

7. they, themselves, have had the opportunity to become familiar with the Compensatory Education guidelines, and

8. they, themselves, have had the opportunity to become familiar with the Compensatory Education Program objectives.

For item Nos. 21 through 26, the staff members were asked to state their perceptions on the conditions which existed among the students in each of the classrooms. The responses were averaged to summarize the prevalence of each condition in both schools combined.

No particular condition stands out from the rest as being much more frequent, but that any such conditions should exist at all should give concern to the entire school community. The relatively high figures in the categories of "low self-concept" and of "unsatisfactory peer relations" might suggest that the bilingual-bicultural program

should continue its efforts to ameliorate these conditions. It should also be noted that the staff members at Washington school feel that none of the students show a lack of interest in cultural differences and that there are very few instances of hostility toward different ethnic groups.

Item No. 27 deserves special comment, by itself. According to the observations of the staff members at both schools, there are more children who speak English and Spanish (an average of 4.38 per classroom) than children who speak English and some other second language. This number could perhaps be found to be even larger if one were able to clarify further the condition of those children who were classified as able to speak no English or as able to speak little English. Even as the data stands, however, there seems to be justification for offering the bilingual program in Spanish at Taylor and Washington schools as a means of accommodating the greatest number of students with knowledge of a second language.

It should be noted that the perceptions of the teachers on this item are markedly different than the perceptions of the students on the same item. Students at both Taylor and Washington schools perceive that there are more of their schoolmates who speak English and Chinese than those who speak English and some other second language. (Cf. item No. 17 in the Student Version) Although this discrepancy of opinion does exist in response to the Needs Assessment Questionnaire the actual facts could be verified through some other form of investigation.

On item Nos. 28 through 34, the staff were asked to make a judgment on discrete aspects of a topic. The most meaningful way of interpreting the variation of responses given by the staff members would

seem to be that of noting which responses were subscribed to by the largest percentage of the students. A word of caution should be mentioned, however, with respect to the interpretation of this data since the responses were often quite evenly spread over all the possible alternative responses and no large degree of unanimity appeared in the selection of any of the responses. With such reservations held in mind, the following observations can be made:

1. The largest percentage of staff members at both Taylor and Washington see bilingual education as the teaching of the same class material twice, once in English and once in a second language.

2. The largest percentage of staff members at Taylor feel that bilingual education should be offered to all students throughout the district with parents and students deciding to be in such classes. At Washington, however, the largest percentage of staff members feel that bilingual education should be offered to all students in all the district's schools.

3. There is a rather even dispersion of opinion among staff members as to the various grade levels at which bilingual education should be offered, it it is to be offered.

4. The largest percentage of staff members at Taylor feel that both the teacher and the teacher-aides must be bilingual; whereas, the largest percentage of staff members at Washington feel that the teacher may be English speaking only but that the aide must be bilingual.

5. The largest percentage of staff members at Taylor school feel that the greatest benefit from the bilingual program for the English-speaking student is that it will help them learn a second language; whereas, the largest percentage of staff members at Washington feel that the greatest benefit for the English-speaking student lies in helping them appreciate other cultures and to get along with their non-English-speaking schoolmates.

6. The largest percentage of staff members at Taylor school see the greatest value of the bilingual program for the non-English-speaking child to be respect shown for the child and his language. At Washington school, the largest percentage of staff members see the bilingual program as benefiting the non-English-speaking child most by helping him learn what his classmates are learning in his own language while learning to speak English.

Management

In the evaluation of the management component of the bilingual education project, the evaluator made a study of the program of events scheduled for the year and the extent to which the program was followed and successfully executed. Note was also made as to the amount of participation by those persons who were expected to be involved. A copy of the list of activities planned for each month was obtained from the project director. Table 17 lists each of the activities which had been planned in advance for the project year, indicates what was actually done to complete each activity and adds comments, when needed, relative to the completion of the activity.

The management aspect of the bilingual education project is important because of the fact that the teaching staff looks to the management for assistance in establishing common program objectives, for support in terms of morale and materials and for direction in the organization of its efforts.

Table 17

Month & Dates	Proposed Activities	Activity Done	Activity Not Done	Comments
June 18-22 & 25-30	Writing new units for 6th grade science to correlate with district adoptions	x		Completed by teacher team from both schools with extension of time into September.
July	Submission of evaluation report to State and Washington, D.C.	x		Done with help of teachers from both schools.
	Research on available materials	x		
August 13-17 & 20-24	Workshop for teacher and teacher-aides in conjunction with Teacher Corps, District and State	x		Attended by some teachers and teacher-aides from both schools.
September	District and Title I, Title VII Pre-testing	x		
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Administrative Advisory Committee Meeting		x	
	Parent Advisory Committee Meeting		x	
October	Video-taping of staff's classroom performance		x	Functioning equipment was lacking.
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Teacher progress rating		x	Lack of video-taping equipment.
	Parent Advisory Committee Meeting		x	

Table 17 - Con'd.

Month & Dates	Proposed Activities	Activity Done	Activity Not Done	Comments
November	Curriculum Development		x	
	Use of Consultant Services		x	
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Parent Advisory Committee Meeting		x	
December	Curriculum Development		x	
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Administrative Advisory Committee Meeting		x	
	Use of Consultant Services		x	
January	Curriculum Development		x	
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Teacher progress rating		x	Lack of video taping equipment.
February	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Parent Advisory Committee Meeting		x	
	Use of Consultant Services		x	

Table 17 - Con'd.

Month & Dates	Proposed Activities	Activity Done	Activity Not Done	Comments
March	Curriculum Development		x	
	Inservice training session for bilingual education staff	x		Staff from both schools attended.
	Use of Consultant Services		x	
April	Curriculum Development		x	
	Teacher progress rating		x	Lack of video-taping equipment
	In-service training session for bilingual education staff	x		Staff from both schools attended.
	Administrative Advisory Committee Meeting		x	
May	Post-testing in all areas	x		
	Parent Advisory Committee Meeting		x	

Several observations can be made from the record of the management activities planned and completed or not completed for the project year. Some staff members from both Taylor and Washington schools did attend the summer workshop as well as the monthly in-service training sessions held during the school year. The video-taping of the teachers' and teacher-aides' classroom performance and the teacher progress ratings, which were dependent upon the video-taping, were not done because the video-taping equipment was not in operating order. Evidently no other activity was used in substitution for the video-taping method of working toward improving staff performance.

Other serious defaults, however, became evident from the table. There was no attention given to curriculum development during a period when staff members are asking for direction, sequencing of course content and organization of effort. A lack of thrust in this direction can lead the staff to diminish its efforts in the offering of bilingual education and may quickly result in low morale throughout the entire program.

The absence during the year of meetings with the Administrative Advisory Committee and with the Parent Advisory Committee is also particularly harmful at this time. A principal at one of the schools seems to be somewhat disenchanted with the bilingual education project and has directed the students will be enrolled in the program only if the parents positively and specifically request that their children be involved in the program. This year was a crucial time to reinforce the value and worth of the bilingual program in the minds of both the Administrative Advisory and Parent Advisory Committees. The bilingual education program should not be something foisted upon the parents and students, but should rest upon their

own conviction that the program has something valuable to offer to those students who are in need of it. Meetings with the Advisory Committees were, of course, the proper means of winning such support and cooperation.

The schedule listed in Table 17 makes mention only of the activities related to that part of the bilingual education project which was under the sponsorship of the federal program. The evaluator would like to mention at this point what happened in that part of the bilingual education program which was carried under the sponsorship of the district, itself, i.e., the program at the kindergarten level through the second grade. It is evident that the district is offering very little direction and support for its part of the program. Since no one is actively in charge of overseeing the program, the bilingual staff in the schools is going off in all directions. Some staff members, personally convinced of the values of bilingual education, are diligently continuing in their efforts to provide bilingual instruction in their classrooms. Other members, however, because of the lack of the same personal conviction concerning the values of bilingual education, or because the feel pressured by other activities and programs, have in effect given up any attempt to offer bilingual instruction. But even those who are continuing to offer bilingual instruction seriously lack the guidance of active director and, at least in some instances, the support of the school's administrative staff.

The administrative staff at the school level feels, in turn, that the district administrators are not providing the necessary support in terms of personnel and that little direction and supervision is being given to the bilingual education program so that it

can be conducted effectively. This is a serious criticism, but one which should be given immediate attention if bilingual education is to continue in the Stockton Unified School District after support from the federal program has been phased out.

Summary and Recommendations

The establishment of the bilingual education project in the Stockton Unified School District under ESEA Title VII has sought to answer the need of children who come from a non-English-speaking background and who share in a cultural heritage different than that of the majority population. This evaluation study of the effects of the program does show that some definite progress is being made in accommodating these children in our district's schools. The children's degree of competence in the mastery of the performance objectives is evidence, at least in part, of the effectiveness of the bilingual education program.

A word of commendation must be extended to the members of the teacher and teacher-aide staff who are working diligently and enthusiastically in their support of the entire bilingual education program. The question arises, however, whether sufficient time is being allotted to bilingual instruction within the daily class schedule so that the staff can do its job properly and effectively. The evaluator seriously doubts that twenty to fifty minutes per day is an adequate amount of time for bilingual instruction.

The program is not without its defects. Certain areas need immediate attention and remediation. There seems to be points of friction between those in charge of the federally sponsored part of the program and those in charge of the part sponsored by the school district. Rather than a spirit of cooperation and mutual assistance, there seems to exist a spirit of isolation and independence. Without enthusiastic direction and support the district's

part of the program, particularly, is beginning to falter and fall apart. In view of the present needs of the bilingual program, the following recommendations are submitted by the evaluator:

1. More communication should be established among all elements of the school community, i.e., among the program directors, the district's administrative staff, the school principals, the teaching staff, the parents and the students. Through such communication the values and goals of the bilingual program should be constantly reviewed and clarified. Meetings should be scheduled and held regularly.
2. The district should appoint not a nominal director, but a functioning director who is provided with sufficient time to oversee and supervise the operation of the district's part of the program in all its details.
3. To the fullest extent possible, bilingual teachers should be employed to conduct the actual instructional phase of the program. Teacher-aides are helpful to the teachers, but should not be given the major responsibility of teaching students since they do not have adequate training to carry such responsibilities. Monolingual teachers are also often prone not to lend the needed support for bilingual instruction if they are not closely involved with its actual execution.
4. A review should also be made of the advisability of enrolling all students, regardless of language and cultural background, into the bilingual program at the two schools. The Spanish-speaking students are being somewhat effectively accommodated

through the bilingual program, and the program should be retained for their benefit. However, if the bilingual program is viewed as a means of training non-Spanish-speaking students to speak Spanish, perhaps some other more effective means, such as a Spanish language course, could be used. If it is determined that the bilingual program is to serve all students, both the Spanish-speaking and the non-Spanish-speaking, then it will become all the more necessary to increase the time allotment for bilingual instruction.

5. A better method should be devised for obtaining a larger and more representative response on the Needs Assessment Questionnaire. The use of the instrument itself is commendable, but the actual number of responses received this year is inadequate as a basis for judging the opinions of the parents, particularly. Perhaps a more intensive and personal, interview type of approach would be more effective than a random distribution of questionnaires with only a few parents taking the time and effort to respond.
6. Instructional materials should be provided in greater quantity and variety so that the teaching staff can have the materials it needs to instruct the students effectively.
7. Curriculum revision should be given constant attention and be based upon observation of the students' performance on the objectives. The objectives, themselves, should be sequentially related to each other, and those objectives which prove too difficult for the students should be modified.

8. Attention should be given to those students who have not been able to accomplish the objectives. In such cases, the instruction should be revised and repeated until all students succeed in mastering all the objectives. It is assumed here that the program is committed to criterion testing and not to normative testing.

9. A more positive check should be made on the number of performance objectives actually taught and tested in each classroom. A lack of verification in this matter leads to confusion as to what the instructional program has actually accomplished.

10. A comparison should be made from year to year on the academic accomplishment of the students at each grade level in the bilingual program. This measure should be able to show the continued effectiveness and progress of the program.

11. More effort should be given to the development of a satisfactory Spanish language test in order to be able to measure the students' development in the language as a side-product of bilingual instruction. The instrument devised this year was too hastily formed and too restricted in its scope.

12. Effort should be made to re-establish the practice of video-taping the staff's classroom performance and of holding subsequent conferences between the teachers and supervisors. If this procedure is financially infeasible, some other method of helping the staff to improve should be devised.

13. A study should be made of the affective development of the students participating in the bilingual education program. This phase of the children's development seems to be much in evidence but has not yet been properly measured.

APPENDIX

SPANISH LANGUAGE TEST

Kindergarten Through Second Grade

1. Buenos Dias, Cómo estás?
2. ?Cómo te llamas?
3. Cuenta los numeros. 1 - 2 - 3 - 4 - 5
4. ?Qué son estos?
   (Show color wheel)
   Ans: Son Colores
5. ?Qué color es éste?
6. ?Qué son éstas?
   (Show a shape)
   Ans: Esas son formas.
7. ?Qué forma es ésta? or Que es esto?
8. ?Qué forma tiene la mesa?
9. ?Qué es ésta?
   (Show picture)
   Ans: La familia.
10. ?Quién es el papá?
11. ?Quién es la mamá?
12. ?Cómo te sientes?
    Ans: Bien o mal.
13. Levanta la mano.
14. ?Qué color es el pelo de la niña (el niño)?
15. Toca la boca.

1. ?Qué es esto líquido o sólido?
   (Hold a rock and ask)

2. ?Qué es esto sólido o líquido?
   (Hold a jar of water and ask)

3. ?Qué color es esto?
   (Show color wheel and ask)

4. Nombra cinco colores.

5. Nombra dos seres vivientes.
   (Show picture of aquarium and ask)

6. Nombra dos seres no vivientes.

7. ?Cuál es el presidente de Estados Unidos hoy?
   (Show 4 pictures of presidents and ask)

8. ?En dónde habitaron los indios?
   (Show map of Western Hemisphere)

9. ?Cuál es el número de tu teléfono?
   (Show picture of telephone)

10. ?Quién es el principal de la escuela Taylor (Washington)?

11. Nombra tres formas de comunicación.
    (Show pictures)

12. Nombra tres formas de transportación.
    (Show pictures)

13. Cuenta hasta el numero 20.
    (Show numerals, ask)

14. Lee esta sílaba.
    (Show book Camino de la Escuela)

Taylor: 15. ?Está fria o caliente la agua?
    (Have student hold jar, ask)

Wash.: 15. Pon el lapiz arriba del libro.

Fourth Grade

1. ?Adónde está el estado de California?
   (Show student a map of the U.S. and ask)

2. ?En qué ciudad vives tu?

3. ?Quién es este señor?
   (Show student the picture map of El Camino Real and ask)

4. ?Qué son estos puntos?

5. ?Puedes nombrar una mission? o Dime el nombre de una mission.

6. Los Anglos Americanos viajaban en carromatos a la tierra desconocida. ?Cómo viajamos nosotros hoy día, en carros o en carromatos?
   (Show students a picture of a modern car and a covered wagon and ask)

7. Estos son los meses del año.
   ?En que mes es tu cumplianos?
   (Show student the birthday graph and ask)

8. ?En qué mes hay más cumplianos?

9. ?En que mes no hay cumplianos?

10. ?Dónde está el valle de San Joaquín?
    (Show student a map of California, ask)

11. Nombra las tribus que vivieron en el valle de San Joaquín?
    (Show student the map of the California Indians and ask)

12. ?Las tribus Pomo y Miwok vivieron en la costa del norte o en la costa del sur?

Fifth Grade

1. Haz un circuito cerado.
   (Give student electrical apparatus)

2. Haz un circuito abierto.

Taylor: 3. ?Qué envase tiene el polvo?
   (Show the student 2 jars containing 1) clear liquid, 2) powder)

Wash: 3. ?Cuál es el líquido? ?Cuál es el polvo?
   (Show student 2 jars containing a) clear liquid and b) powder)

Taylor: 4. ?Qué es esta parte de la planta?
   (Show student chart of plant. Point to the seed.)

Wash: 4. ?Cuál es el imán de barra?
   (Show student different magnets, a horseshoe and bar)

Taylor: 5. ?Qué es esta parte de la planta?
   (Point to blossom)

Wash: 5. ?Cuál es el continente Norte Americano?
   (Show student a map of the world, ask)

Taylor: 6. ?Cómo se llama este poste?
   (Show a picture of the totem pole)

Wash: 6. ?Qué están haciendo las mujeres y muchachas?
   (Show student a picture of women or girls sewing or cooking)

7. ?Qué es esto?
   (Show student chart of North American Indian Fort)

8. ?Que comían los Indios?

9. Cierra los ojos.

10. Levanta la mano.

Sixth Grade

1. ?Qué país está al norte del Ecuador?
   (Show student map of South America)
2. ?Qué país está al sur del Ecuador?
3. ?Dónde corre el río Amazonas?
4. ?Qué clima tiene Sud America?

Taylor: 5. ?Qué me puedes decir de los Aztecas?

Wash: 5. ?Qué indios vivían en Sud America, los Aztecas o los Incas?

Taylor: 6. ?Cómo se llama esto?
(Hold a graduated cylinder, ask)

Wash: 6. ?Dónde está la tierra tropical de Centro America?
(Show student map of Central America, ask)

Taylor: 7. ?Cada línea en el cilindro graduado representa qué?

Wash: 7. Nombra un país en Centro America.

Taylor: 8. ?Cómo se llama esto?
(Hold a thermometer, ask)

Wash: 8. ?Qué canal divide Centro America y deja pasar barcos?

Taylor: 9. ?Cada linea en el termometro representa qué?

Wash: 9. ?De qué tribu es este indio?
(Show student picture of Mayan Indian male, pointed head, crossed eyes, ask)

Taylor: 10. ?Cómo se llama esto?
(Hold a balance beam, ask)

Wash: 10. ?Qué indios vivían en Mexico?

(Alternative Questions - Taylor)

1. Pon tus manos arriba de tu cabeza.
2. Cierra los ojos.
3. Tocate la nariz.
4. ?Qué usas para comer?
5. ?Qué bailamos para el Cinco de Mayo?

LIST OF QUESTIONS USED BY THE EVALUATOR IN APPRAISING THE COMPETENCE OF USING SPANISH IN SOCIAL SITUATIONS

DIRECTIONS:

Students were asked to imagine that they were in Mexico and that a child of their age wanted to speak to them and to become their friend. The students were asked what they would respond if the Mexican child asked them the following questions.

The student was directed to:
1. Answer the question in Spanish, if they could.
2. Answer in English, if they could not answer in Spanish.
3. Tell the examiner that they could not understand the question, if that was so.

1. ?Cómo te llamas?
2. ?Cuántos hermanos tienes?
3. ?Cuántos Hermanas tienes?
4. ?Cuántos años tienes?
5. ?Cómo se llama la calle en donde vives?
6. ?Qué te gusta más - ?ir a la escuela? o ?ir al cine?
7. ?Dónde estás ahora?
8. ?Qué hora es ya?
9. ?Cómo se llama su amigo(a) favorito(a)?
10. ?Qué te gustan más - los dulces o las frutas?
11. ?Tienes una bicicleta?
12. ?Tienes un perro?
13. ?Tienes un gato?
14. ?Qué vas a comer para la cena?